FIGURES







NAD 1983 UTM Zone 13N Date: Mar 28/24



Characterization Sampling Site Schematic PLU 16 Twins Wells Ranch CVB

FIGURE:



Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for naccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes. Note: Image from Google Earth Pro, 2023; georeferenced by Vertex Professional Services Ltd. (Vertex), 2024. Approximate site boundary from imagery by Vertex, 2024. Site features from GPS, Vertex, 2024.



Released to Imaging: 5/22/2024 2:49:22 PM

VERSATILITY. EXPERTISE.

TABLES

Client Name: XTO Energy

Site Name: PLU 16 Twin Wells Ranch CVB NMOCD Tracking #: nAPP2401247250

Project #: 24E-00197 Lab Report: 885-1544-1

		al Characterizatio	-		•	-	u =u.vo.u.						
	Sample Descrip	Field Screening			Petroleum Hydrocarbons								
			S			Vol	atile		Extractable				Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH24-01	0	March 19 2024	-	0	98	ND	ND	ND	ND	ND	ND	ND	85
DI124 01	2	March 19 2024	-	0	95	ND	ND	ND	ND	ND	ND	ND	80
BH24-02	0	March 19 2024		0	135	ND	0.0022	ND	ND	ND	ND	ND	170
ВП24-02	2	March 19 2024	-	0	113	ND	ND	ND	ND	ND	ND	ND	90
BH24-03	0	March 19 2024	-	0	195	ND	ND	ND	ND	ND	ND	ND	110
B1124-03	2	March 19 2024	-	0	128	ND	ND	ND	ND	ND	ND	ND	75
BH24-04	0	March 19 2024		0	330	ND	0.0047	ND	ND	ND	ND	ND	100
	2	March 19 2024	-	0	150	ND	ND	ND	ND	ND	ND	ND	90
	4	March 19 2024	-	0	105	ND	ND	ND	ND	ND	ND	ND	99
BH24-05	0	March 19 2024	-	0	140	ND	ND	ND	ND	ND	ND	ND	120
	2	March 19 2024	-	0	100	ND	ND	ND	ND	ND	ND	ND	76

[&]quot;ND" Not Detected at the Reporting Limit

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria (on-pad)

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Criteria (off-pad)



[&]quot;-" indicates not analyzed/assessed

Client Name: XTO Energy

Site Name: Poker Lake Unit 16 Twin Wells Ranch CVB

NMOCD Tracking #: nAPP2401247250

Project #: 24E-00197 Lab Reports: 885-2898-1

		Table 4. Confirmatory	/ Sample F	ield Scree	n and Lab	oratory Re	sults - De	pth to Gro	undwater	>100 feet	bgs		
	Sample Description			Field Screening			Petroleum Hydrocarbons						
			S			Volatile Extractable					Inorganic		
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics	Diesel Range Organics	Motor Oil Range Organics	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
0004.04		4 142 2024	(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BS24-01	0	April 12, 2024	0	63	154	ND	ND	ND	ND	ND	ND	ND	78
BS24-02	0	April 12, 2024	0	66	194	ND	ND	ND	ND	ND	ND	ND	110
BS24-03	0	April 12, 2024	0	65	457	ND	ND	ND	ND	ND	ND	ND	160

[&]quot;ND" Not Detected at the Reporting Limit
"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Remediation Closure Criteria Bold and green shaded indicates exceedance outside of NMOCD Reclamation Closure Criteria



APPENDIX A - NMOCD C-141 Report

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS

Action 303160

QUESTIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	303160
	Action Type:
	[NOTIFY] Notification Of Release (NOR)

QUESTIONS

Location of Release Source				
Please answer all the questions in this group.				
Site Name	PLU 16 Twin Wells Ranch CVB			
Date Release Discovered	01/03/2024			
Surface Owner	Federal			

Incident Details				
Please answer all the questions in this group.				
Incident Type	Fire			
Did this release result in a fire or is the result of a fire	Yes			
Did this release result in any injuries	No			
Has this release reached or does it have a reasonable probability of reaching a watercourse	No			
Has this release endangered or does it have a reasonable probability of endangering public health	No			
Has this release substantially damaged or will it substantially damage property or the environment	No			
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No			

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for	or the volumes provided should be attached to the follow-up C-141 submission.
Crude Oil Released (bbls) Details	Cause: Equipment Failure Other (Specify) Crude Oil Released: 0 BBL Recovered: 0 BBL Lost: 0 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Not answered.
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	The flare malfunctioned.

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS, Page 2

Action 303160

QUESTIONS	(continued)
QUESTIONS!	COHUHUCU <i>i</i>

Operator:	OGRID:		
XTO ENERGY, INC	5380		
6401 Holiday Hill Road	Action Number:		
Midland, TX 79707	303160		
	Action Type:		
	[NOTIFY] Notification Of Release (NOR)		

QUESTIONS

supplied to determine if this will be treated as a "gas
' determine using: a volume that: e result of a fire.
he

Initial Response				
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.				
The source of the release has been stopped	True			
The impacted area has been secured to protect human health and the environment	True			
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True			
All free liquids and recoverable materials have been removed and managed appropriately	True			
If all the actions described above have not been undertaken, explain why	Not answered.			

Per Paragraph 4 of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

ACKNOWLEDGMENTS

Action 303160

ACKNOWLEDGMENTS

Operator:	OGRID:		
XTO ENERGY, INC	5380		
6401 Holiday Hill Road	Action Number:		
Midland, TX 79707	303160		
	Action Type:		
	[NOTIFY] Notification Of Release (NOR)		

ACKNOWLEDGMENTS

V	I acknowledge that I am authorized to submit notification of a release on behalf of my operator.
V	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to my operator) to track the notification(s) and corrective action(s) for a release, pursuant to NMAC 19.15.29.
V	I acknowledge that creating a new incident file will require my operator to file subsequent submission(s) of form "C-141, Application for administrative approval of a release notification and corrective action", pursuant to NMAC 19.15.29.
V	I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment.
V	I acknowledge the fact that the acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment.
V	I acknowledge the fact that, in addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 303160

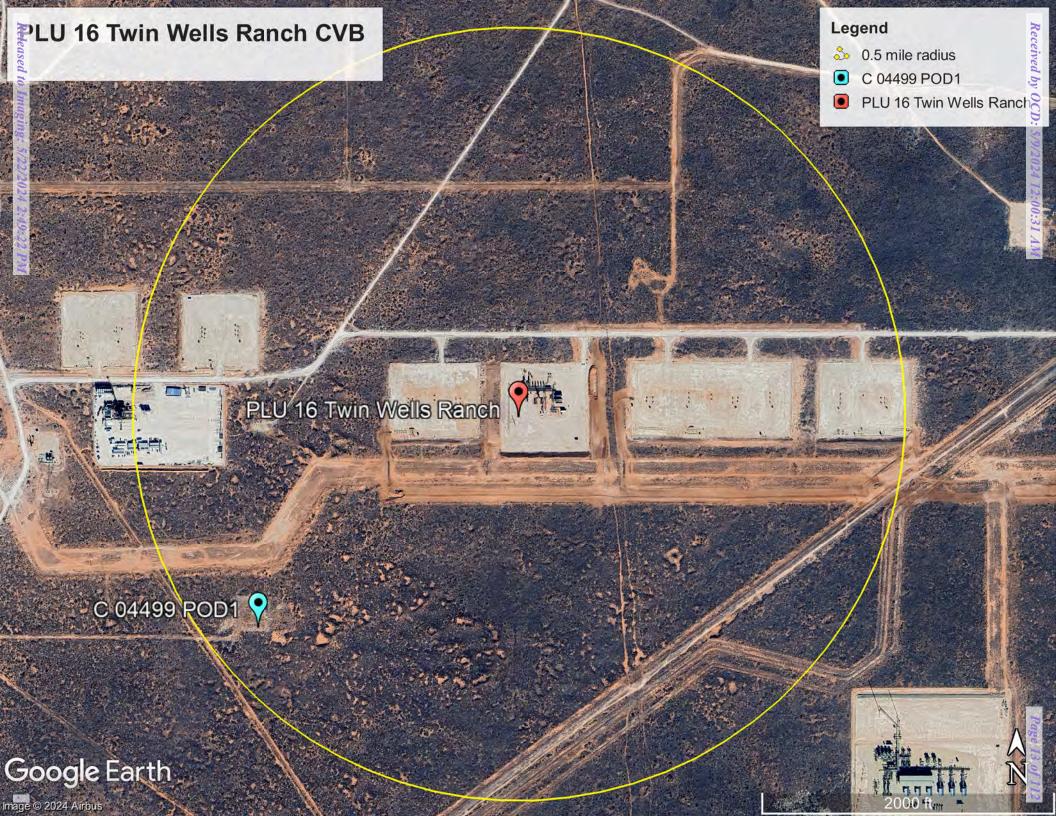
CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	303160
	Action Type:
	[NOTIFY] Notification Of Release (NOR)

CONDITIONS

Created By		Condition Date
mcollins	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.	1/12/2024

APPENDIX B – Closure Criteria Research Documentation





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is

closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Sub-

CUB

3 4 2 20 24S 31E

Water

POD Number C 04499 POD1

Code basin County 64 16 4 Sec Tws Rng

613719 3563732 DistanceDepthWellDepthWater Column

111

Average Depth to Water:

Minimum Depth:

Maximum Depth:

Record Count: 1

<u>UTMNAD83 Radius Search (in meters):</u>

Easting (X): 614255 **Northing (Y):** 3564174.43 Radius: 805

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/17/24 1:56 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

	Ç., k	(acre ft per ann	um)			W-n	(R=POD has been replaced and no longer serves this file, C=the file is closed)		s are sma			-SW 4=SE) est)	(NAD	83 UTN
WR File Nbr C 04499	Sub basin CUB	Use Diversion	on Owner 0 XTO ENERGY INC	County ED	POD Number C 04499 POD1	Well Tag NA	Code Grant	Source	q q q 6416 4 3 4 2				X 613718	3563
<u>C 02021</u>	C	STK	3 BUREAU OF LAND MANAGEMENT	ED	<u>C 02021</u>				1 2	28	24S	31E	614944	35625
<u>C 04760</u>	CUB	MON	0 XTO ENERGY INC.	ED	<u>C 04760 POD1</u>	NA			4 1 2	28	24S	31E	614965	3562
<u>C 04508</u>	CUB	MON	0 WSP USA	ED	C 04508 POD1	NA			4 4 3	15	24S	31E	616298	3564
<u>C 04759</u>	CUB	MON	0 ENSOLUM, LLC	ED	<u>C 04759 POD1</u>	NA			4 2 1	19	24S	31E	611452	3564
<u>C 02020</u>	C	STK	3 BUREAU OF LAND MANAGEMENT	ED	<u>C 02020</u>				4 4	28	24S	31E	615360	35613
<u>C 02440</u>	C	PRO	0 SONAT EXPLORATION	ED	<u>C 02440</u>				2 3	10	24S	31E	616103	35665
C 04388	C	DOM	1 TWIN WELLS RANCH LLC	ED	C 04388 POD1	22333		Artesian	3 2 1	23	24S	31E	617546	3564
<u>C 04576</u>	CUB	EXP	0 TWIN WELLS RANCH LLC	ED	<u>C 04576 POD1</u>	NA		Artesian	1 2 1	23	24S	31E	617699	3564
<u>C 02958</u>	C	STK	3 TWIN WELLS RANCH LLC	ED	<u>C 02958</u>				3 3 4	04	24S	31E	614781	3567€
<u>C 02959</u>	C	STK	3 TWIN WELLS RANCH LLC	ED	<u>C 02959</u>				1 3 2	33	24S	31E	614866	3560€
<u>C 04220</u>	CUB	MON	0 CHEVRON N AMERICA EXPL & PROD	ED	<u>C 04220 POD1</u>	NA			2 3 3	11	24S	31E	617401	356€
<u>C 03558</u>	CUB	EXP	0 BOPCO, LP	ED	<u>C 03558 POD1</u>				1 2 2	25	24S	30E	610412	3562
				ED	<u>C 03558 POD2</u>				1 2 2	25	24S	30E	610412	3562
				ED	<u>C 03558 POD3</u>				1 2 2	25	24S	30E	610412	3562
				ED	<u>C 03558 POD4</u>				1 2 2	25	24S	30E	610412	3562
				ED	<u>C 03558 POD5</u>				1 2 2	25	24S	30E	610412	3562
<u>C 03702</u>	CUB	MON	0 BOPCO, LP	ED	<u>C 03702 POD1</u>				4 1 4	24	24S	30E	610092	3563
<u>C 02783</u>	CUB	OBS	0 U.S. DEPT. OF ENERGY - WIPP	ED	<u>C 02783</u>			Shallow	3 3 1	04	24S	31E	613911	3568
				ED	<u>C 02783 POD2</u>			Shallow	3 3 1	04	24S	31E	613911	3568
<u>C 02784</u>	C	SAN	0 US DEPARTMENT OF ENERGY WASTE ISOLATION PILOT PLANT	ED	<u>C 02784</u>			Shallow	4 2 4	04	24S	31E	613911	3568
<u>C 03470</u>	C	PUB	0 U.S. DEPT. OF ENERGY (WIPP)	ED	<u>C 02783 POD2</u>			Shallow	3 3 1	04	24S	31E	613911	3568
<u>C 02661</u>	CUB	MON	0 SANDIA NATIONAL LABORATORIES	ED	<u>C 02661</u>				3 3 1	04	24S	31E	613969	35684
<u>C 02785</u>	CUB	MON	0 U.S. DEPT. OF ENERGY - WIPP	ED	<u>C 02785</u>				3 3 1	04	24S	31E	613969	35684
<u>C 04633</u>	CUB	EXP	0 DEVON ENERGY	ED	C 04633 POD1	NA			2 1 1	35	24S	31E	617394	3561
<u>C 04478</u>	CUB	MON	0 XTO ENERGY INC	ED	<u>C 04478 POD1</u>	NA			3 3 2	25	24S	30E	610077	3562
<u>C 04479</u>	CUB	MON	0 XTO ENERGY INC	ED	<u>C 04479 POD1</u>	NA			2 1 1	04	25S	31E	614182	3559
<u>C 01914</u>	C	PRO	0 PERRY R BASS	ED	<u>C 01914</u>				4 1 2	04	25S	31E	615064	35592
D 10 /	20													

Record Count: 28

UTMNAD83 Radius Search (in meters):

Easting (X): 614255 **Northing (Y):** 3564174.43 **Radius:** 5000

Sorted by: Distance

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitabi purpose of the data.

1/17/24 9:51 AM ACTIVE & INACTIVE POINTS

^{*}UTM location was derived from PLSS - see Help



NA

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number** C 04499 POD1

Q64 Q16 Q4 Sec Tws Rng

 \mathbf{X}

20 24S 31E 613719 3563732

Driller License: 1249

Driller Company:

ATKINS ENGINEERING ASSOC. INC.

Driller Name:

ATKINS, JACKIE D.UELENER

Drill Start Date: 12/30/2020

Drill Finish Date:

12/30/2020

Plug Date:

01/19/2021

Log File Date:

01/27/2021

PCW Rcv Date:

Source:

Pump Type:

Casing Size:

Pipe Discharge Size:

Estimated Yield:

Depth Well:

111 feet

Depth Water:

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/17/24 2:08 PM

POINT OF DIVERSION SUMMARY

Received by OCD: 5/9/2024 12:00:31 AM

U.S. Fish and Wildlife Service

National Wetlands Inventory

Intermittent 17,000 feet



January 17, 2024

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Pond

Freshwater Forested/Shrub Wetland

Lake

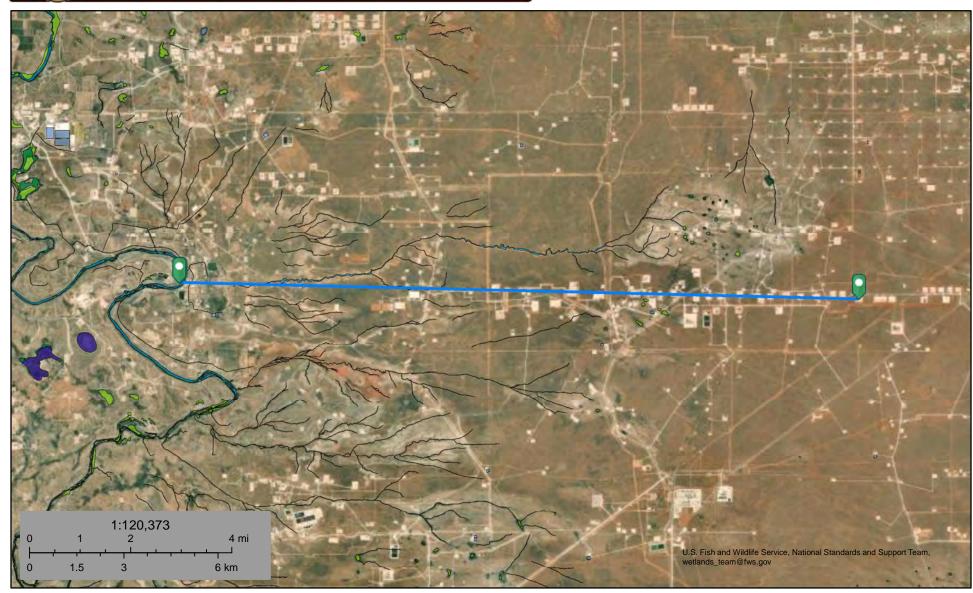
Other

Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



Pond 60,000 feet



January 17, 2024

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Pond

La La

Lake

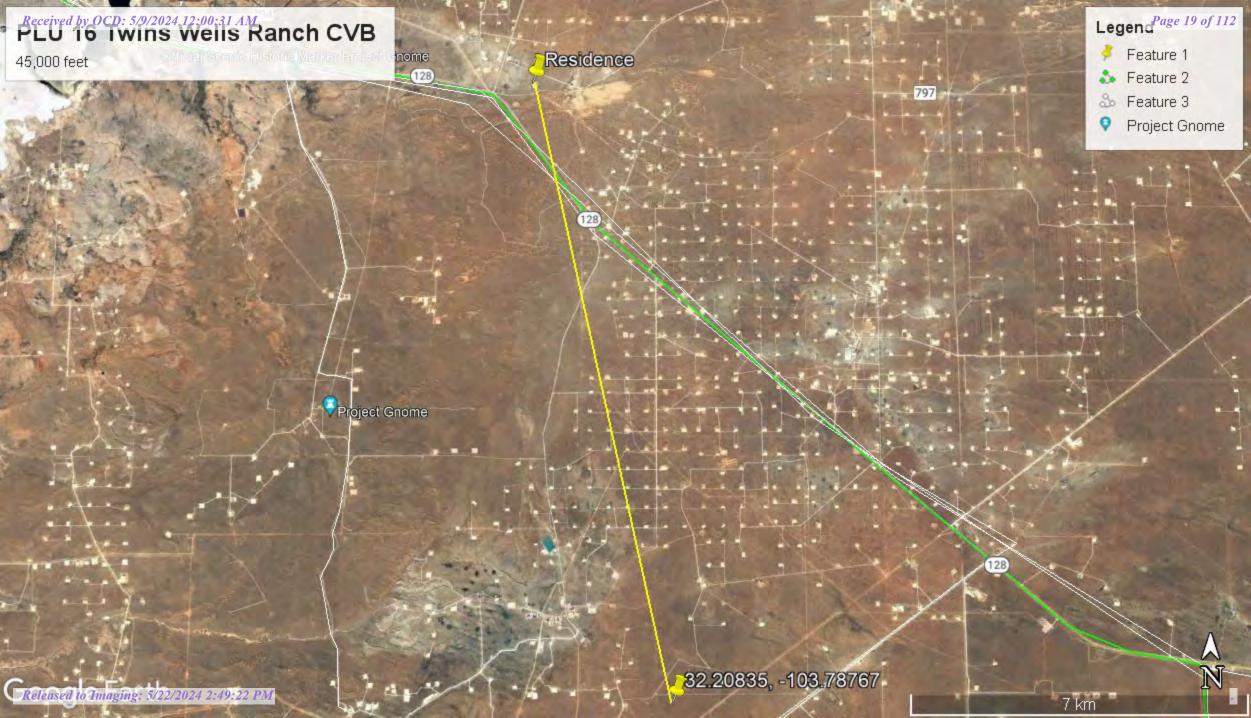
Freshwater Forested/Shrub Wetland



Other

Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



Received by OCD: 5/9/2024 12:00:31 AM

U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetland 12,000 ft



January 17, 2024

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Lake Freshwater Forested/Shrub Wetland

Freshwater Pond

Other

Riverine

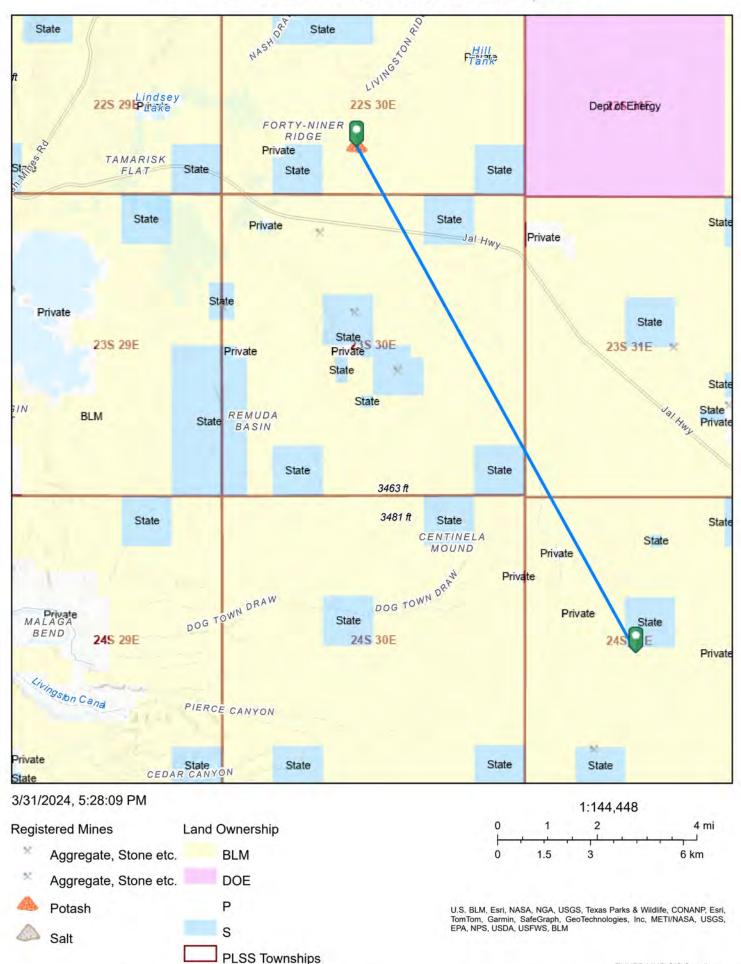
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

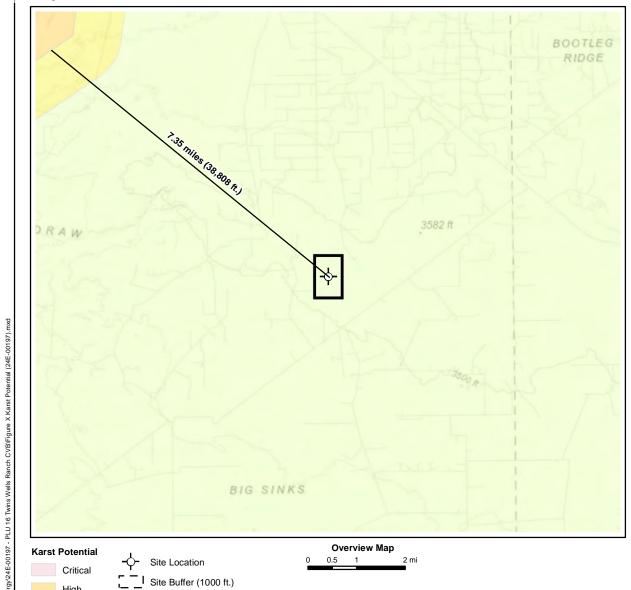
Active Mines in New Mexico



NM Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)

PLU 16 TWR CVB Nearest Mine 61,082 ft







High

Low

Medium

Map Center: 32.2098, -103.7878 NAD 1983 UTM Zone 13N Date: Jan 22/24



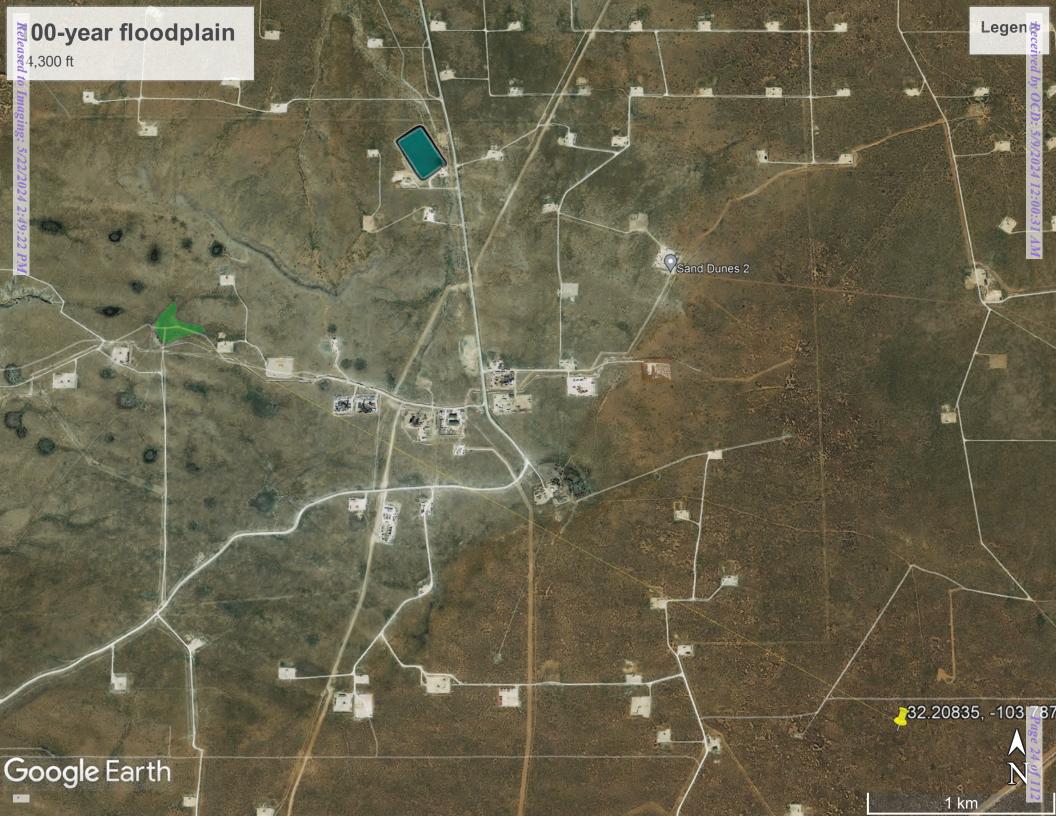
Karst Potential Map PLU 16 Twins Wells Ranch CVB Figure:

X



Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liabiity for inacuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes

Note: Inset Map, Esri 2022; Overview Map: Esri World Topographic. Karst potential data sources from Roswell Field Office, Bureau of Land Mangement, 2020 or United States Department of the Interior, Bureau of Land Management, (2018). Karst Potential.



National Flood Hazard Layer FIRMette





SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD HAZARD AREAS Regulatory Floodway 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X **Future Conditions 1% Annual** Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes. Zone X OTHER AREAS OF Area with Flood Risk due to Levee Zone D FLOOD HAZARD NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D - - - Channel, Culvert, or Storm Sewer **GENERAL** STRUCTURES | LILLILL Levee, Dike, or Floodwall 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation **Coastal Transect** Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary — --- Coastal Transect Baseline OTHER **Profile Baseline FEATURES** Hydrographic Feature Digital Data Available No Digital Data Available MAP PANELS Unmapped

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The pin displayed on the map is an approximate point selected by the user and does not represent

an authoritative property location.

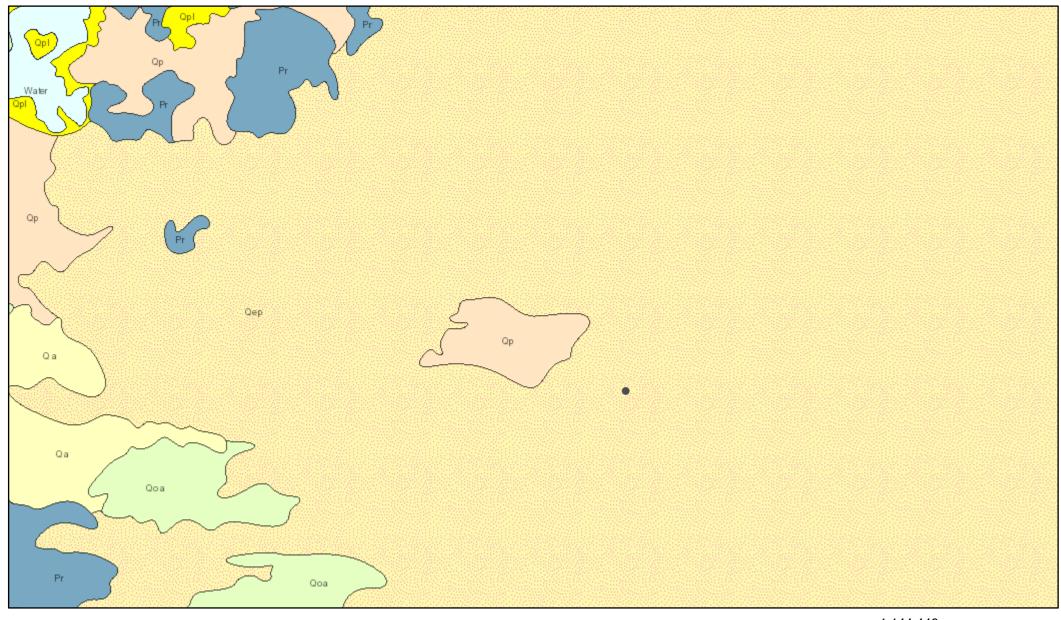
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/17/2024 at 6:55 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



2,000

ArcGIS Web Map



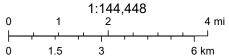
1/17/2024, 5:01:54 PM

Lithologic Units

Playa—Alluvium and evaporite deposits (Holocene)

Water—Perenial standing water

Qa—Alluvium (Holocene to upper Pleistocene)



Esri, NASA, NGA, USGS, NMBGMR, USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global

APPENDIX C – Daily Field Reports

	V	
V	ERTEX	•

Client:	XTO Energy Inc. (US)	Inspection Date:	
Site Location Name:	PLU 16 Twins Wells Ranch CVB	Report Run Date:	3/11/2024 11:35 PM
Client Contact Name:	Garrett Green	API#:	
Client Contact Phone #:	575-200-0729		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
		Summary of ¹	Times
Arrived at Site			
Departed Site			



Site Sketch

Site Sketch



Field Notes

15:47 Arrived on site and began marking areas for 811 call

Next Steps & Recommendations

1



Site Photos



Eastern corner of 811 call area



Viewing Direction: Northeast

Southwestern corner of 811 call area



Northeastern corner of 811 call





Picture of release area



Daily Site Visit Signature

Inspector: Wyatt Wadleigh

Signature:



Client:	XTO Energy Inc. (US)	Inspection Date:	3/19/2024
Site Location Name:	PLU 16 Twins Wells Ranch CVB	Report Run Date:	3/20/2024 12:45 AM
Client Contact Name:	Garrett Green	API#:	
Client Contact Phone #:	575-200-0729		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
		Summary of	Times
Arrived at Site	3/19/2024 1:30 PM		
Departed Site			

Field Notes

- 13:56 Assessed area for hazards informed Amy Ruth I'm on location, filled out JSAs
- 13:56 Began delineating flare release on pad
- 14:07 BH24-01 was sampled at surface and hand augered to 2ft bgs
- 14:24 BH24-02 was hand augered to a depth of 2ft bgs and was sampled at the surface and 2ft bgs
- 14:51 BH24-03 was sampled at surface and to depth of 2ft bgs
- 15:10 BH24-05 was augered at sampled at surface and 2ft bgs
- 15:31 BH24-04 was augered to a depth of 4ft bgs. Samples were taken at surface,2ft and 4ft bgs.
- **16:55** BH24-01 through BH24-05 were all field screened on site with chloride titration and TPH analyzer. All samples were below strictest criteria and were jarred on site.

Next Steps & Recommendations

1



Site Photos

Viewing Direction: Northwest



BH24-01 was augered to a depth of 2ft located just southeast of release area

Viewing Direction: North



BH24-02 is just south of flare release

Viewing Direction: Southwest



BH24-03 located north east of release

Viewing Direction: Southeast



Located just northwest of release area





BH24-04 located roughly 10ft south east of the flare



Daily Site Visit Signature

Inspector: Wyatt Wadleigh

Signature: Signature



Client:	XTO Energy Inc. (US)	Inspection Date:	4/12/2024				
Site Location Name:	PLU 16 Twins Wells Ranch CVB	Report Run Date:	4/12/2024 11:30 PM				
Client Contact Name:	Amy Ruth	API #:					
Client Contact Phone #:	432-661-0571						
Unique Project ID		Project Owner:					
Project Reference #		Project Manager:					
Summary of Times							
Arrived at Site	4/12/2024 7:55 AM						
Departed Site	4/12/2024 2:11 PM						

Field Notes

- **8:22** Completed JSA on arrival. Called lease operator Lionel and confirmed the facility was shut down and existing flame was the pilot only. Confirmed with Amy Ruth that work could proceed.
- **8:44** Swept sampling area east of flare with magnetic locator prior to collection of surface samples.
- **13:56** Collected 5-point composite base samples BS24-01, BS24-02, and BS24-03 from release and fire area immediately east of flare. Field screening results were below NMOCD strictest criteria for chloride and TPH.
- 13:57 Confirmation sampling completed pending laboratory results.

Next Steps & Recommendations



Site Photos





At pad entrance facing south.

Viewing Direction: Southeast



Northwest corner of confirmation sampling area facing southeast.

Viewing Direction: Southwest



Northeast corner of confirmation sampling area facing southwest.

Viewing Direction: Northeast



Southwest corner of confirmation sampling area facing northeast.





Southeast corner of confirmation sampling area facing northwest.



East edge of confirmation sampling area facing west.



Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:

APPENDIX D – Confirmation Sampling Notification

SIGN-IN HELP

Searches

Operator Data

Hearing Fee Application

OCD Permitting

Home

Operator Data

Action Status

Action Search Results

Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID: 331369

Districts:

Artesia

Operator:

[5380] XTO ENERGY, INC

Counties:

Eddy

Description:

XTO ENERGY, INC [5380]

, PLU 16 Twin Wells Ranch CVB

, nAPP2401247250

Status:

APPROVED

Status Date:

04/09/2024

References (1):

nAPP2401247250

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#) nAPP2401247250

Incident Name NAPP2401247250 PLU 16 TWIN WELLS RANCH CVB @ 0

Incident Type Fire

Incident Status Initial C-141 Approved

SIGN-IN HELP

Searches	Operator Data	Hearing Fee Application

Surface Owner	Federal
Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	500
What is the estimated number of samples that will be gathered	3
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/12/2024
Time sampling will commence	08:00 AM
Warning: Notification can not be less than two business days prior to conducting final sampling	ng.
Please provide any information necessary for observers to contact samplers	SCarttar@vertex.ca
Please provide any information necessary for navigation to sampling site	D-21-24S-31E 32.20835, -103.78767

Acknowledgments

This submission type does not have acknowledgments, at this time.

Comments

No comments found for this submission.

Conditions

Summary:

aromero (4/9/2024), Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

OCD Permitting

Page 45 of 112

SIGN-IN HELP

Searches **Operator Data Hearing Fee Application**

Go Back

New Mexico Energy, Minerals and Natural Resources Department | Copyright 2012 1220 South St. Francis Drive | Santa Fe, NM 87505 | P: (505) 476-3200 | F: (505) 476-3220

> EMNRD Home OCD Main Page OCD Rules Help

APPENDIX E – Laboratory Data Reports and Chain of Custody Forms

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carter Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220

Generated 3/26/2024 2:50:48 PM

JOB DESCRIPTION

PLU 16 Twin Wells Ranch CVB

JOB NUMBER

885-1544-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

Generated 3/26/2024 2:50:48 PM

Authorized for release by Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com (505)345-3975 2

3

6

8

1 በ

11

Client: Vertex Laboratory Job ID: 885-1544-1

Project/Site: PLU 16 Twin Wells Ranch CVB

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	7
QC Sample Results	14
QC Association Summary	18
Lab Chronicle	21
Certification Summary	24
Method Summary	25
Chain of Custody	26
Receipt Checklists	29

5

4

6

8

9

10

Definitions/Glossary

Client: Vertex Job ID: 885-1544-1

Project/Site: PLU 16 Twin Wells Ranch CVB

Qualifiers

GC VOA

Qualifier **Qualifier Description** LCS and/or LCSD is outside acceptance limits, high biased.

S1+ Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier **Qualifier Description**

F2 MS/MSD RPD exceeds control limits

S1-Surrogate recovery exceeds control limits, low biased. S1+ Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) Limit of Detection (DoD/DOE) LOD Limit of Quantitation (DoD/DOE) LOQ

EPA recommended "Maximum Contaminant Level" MCL Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MI Minimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) **TFF TEQ** Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Case Narrative

Client: Vertex Job ID: 885-1544-1

Project: PLU 16 Twin Wells Ranch CVB

Job ID: 885-1544-1 Eurofins Albuquerque

Job Narrative 885-1544-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to
 demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the
 method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 3/21/2024 8:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C.

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-76353 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-76342 and analytical batch 880-76353 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH24-01 0' (885-1544-1), BH24-01 2' (885-1544-2), BH24-02 0' (885-1544-3), BH24-02 2' (885-1544-4), BH24-03 0' (885-1544-5), BH24-04 0' (885-1544-7), BH24-04 2' (885-1544-8), BH24-04 4' (885-1544-9), BH24-05 0' (885-1544-10), BH24-05 2' (885-1544-11), (885-1544-A-1-E MS) and (885-1544-A-1-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCS 880-76342/1-A). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-76282 and analytical batch 880-76378 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH24-03 2' (885-1544-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-76282 and analytical batch 880-76378 was outside control limits. Sample non-homogeneity is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-76321 and analytical batch 880-76356 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

BH24-01 0' (885-1544-1), BH24-01 2' (885-1544-2), BH24-02 0' (885-1544-3), BH24-02 2' (885-1544-4) and BH24-03 0' (885-1544-5)

Eurofins Albuquerque

2

-

1

5

7

8

10

Case Narrative

Client: Vertex Job ID: 885-1544-1

Project: PLU 16 Twin Wells Ranch CVB

Job ID: 885-1544-1 (Continued)

Eurofins Albuquerque

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

3

4

5

7

Ō

40

11

Project/Site: PLU 16 Twin Wells Ranch CVB

Client Sample ID: BH24-01 0'

Date Collected: 03/19/24 13:00 Date Received: 03/21/24 08:50

Lab Sample ID: 885-1544-1

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/22/24 23:32	1
Toluene	ND		0.0020	mg/Kg		03/22/24 14:52	03/22/24 23:32	1
Ethylbenzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/22/24 23:32	1
m-Xylene & p-Xylene	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/22/24 23:32	1
o-Xylene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/22/24 23:32	1
Xylenes, Total	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/22/24 23:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130			03/22/24 14:52	03/22/24 23:32	1
1,4-Difluorobenzene (Surr)	74		70 - 130			03/22/24 14:52	03/22/24 23:32	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

wethod: 5W646 6015B NW - Diesei Range Organics (DRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND	F2	50	mg/Kg		03/22/24 10:50	03/23/24 11:06	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 11:06	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 11:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130			03/22/24 10:50	03/23/24 11:06	1
o-Terphenyl	80		70 - 130			03/22/24 10:50	03/23/24 11:06	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	85		5.0	mg/Kg			03/22/24 21:41	1

Client Sample ID: BH24-01 2'

Date Collected: 03/19/24 13:15 Date Received: 03/21/24 08:50

Lab Sample ID: 885-1544-2

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/22/24 23:58	1
Toluene	ND		0.0020	mg/Kg		03/22/24 14:52	03/22/24 23:58	1
Ethylbenzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/22/24 23:58	1
m-Xylene & p-Xylene	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/22/24 23:58	1
o-Xylene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/22/24 23:58	1
Xylenes, Total	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/22/24 23:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	158	S1+	70 - 130			03/22/24 14:52	03/22/24 23:58	1
1,4-Difluorobenzene (Surr)	104		70 - 130			03/22/24 14:52	03/22/24 23:58	1

Method: SW846 8015B NM -	Diesel Range	Organics	(DRO) (GC)	
Analyte	Result	Qualifier	RL	Unit
Casalina Danga Organias	ND.		<u></u>	malka

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND	50	mg/Kg		03/22/24 10:50	03/23/24 12:12	1
Diesel Range Organics (Over C10-C28)	ND	50	mg/Kg		03/22/24 10:50	03/23/24 12:12	1
Oll Range Organics (Over C28-C36)	ND	50	mg/Kg		03/22/24 10:50	03/23/24 12:12	1

Project/Site: PLU 16 Twin Wells Ranch CVB

Lab Sample ID: 885-1544-2 Client Sample ID: BH24-01 2'

Date Collected: 03/19/24 13:15 **Matrix: Solid**

Date Received: 03/21/24 08:50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	03/22/24 10:50	03/23/24 12:12	1
o-Terphenyl	73		70 - 130	03/22/24 10:50 0)3/23/24 12:12	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
	Chloride	80	5.0	mg/Kg			03/22/24 21:46	1	

Lab Sample ID: 885-1544-3 Client Sample ID: BH24-02 0' **Matrix: Solid**

Date Collected: 03/19/24 13:30 Date Received: 03/21/24 08:50

Method: SW846 8021B - Vo	latile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 00:24	1
Toluene	0.0022		0.0020	mg/Kg		03/22/24 14:52	03/23/24 00:24	1
Ethylbenzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 00:24	1
m-Xylene & p-Xylene	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 00:24	1
o-Xylene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 00:24	1
Xylenes, Total	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 00:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Bromofluorobenzene (Surr)	132	Q1±	70 130			03/22/24 14:52	03/23/24 00:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130	03/22/24 14:52	03/23/24 00:24	1
1,4-Difluorobenzene (Surr)	88		70 - 130	03/22/24 14:52	03/23/24 00:24	1
_						

Method: SW846 8015B NM - Die	esel Range Organics (DRO) (GC)					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	50	mg/Kg		03/22/24 10:50	03/23/24 12:34	1
(GRO)-C6-C10							
Diesel Range Organics (Over	ND	50	mg/Kg		03/22/24 10:50	03/23/24 12:34	1
C10-C28)							
Oll Range Organics (Over C28-C36)	ND	50	ma/Ka		03/22/24 10:50	03/23/24 12:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	03/22/24 10:50	03/23/24 12:34	1
o-Terphenyl	81		70 - 130	03/22/24 10:50	03/23/24 12:34	1

Method: EPA 300.0 - Anions, lo	on Chromat	ography -	Soluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		5.0	mg/Kg			03/22/24 21:50	1

Client Sample ID: BH24-02 2' Lab Sample ID: 885-1544-4 Date Collected: 03/19/24 13:45 **Matrix: Solid**

Date Received: 03/21/24 08:50

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 00:51	1
Toluene	ND		0.0020	mg/Kg		03/22/24 14:52	03/23/24 00:51	1
Ethylbenzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 00:51	1
m-Xylene & p-Xylene	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 00:51	1
o-Xylene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 00:51	1
Xylenes, Total	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 00:51	1

Project/Site: PLU 16 Twin Wells Ranch CVB

Client Sample ID: BH24-02 2'

Date Collected: 03/19/24 13:45 Date Received: 03/21/24 08:50

Lab Sample ID: 885-1544-4

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130	03/22/24 14:52	03/23/24 00:51	1
1,4-Difluorobenzene (Surr)	87		70 - 130	03/22/24 14:52	03/23/24 00:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	DII Fac
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130	03/22/24 14:52 03/23/24 00:51	1
1,4-Difluorobenzene (Surr)	87		70 - 130	03/22/24 14:52 03/23/24 00:51	1
Г					

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/22/24 10:50	03/23/24 12:55	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 12:55	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 12:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			03/22/24 10:50	03/23/24 12:55	1
o-Terphenyl	75		70 - 130			03/22/24 10:50	03/23/24 12:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	90		5.0	mg/Kg			03/22/24 21:55	1	

Lab Sample ID: 885-1544-5 Client Sample ID: BH24-03 0' Date Collected: 03/19/24 14:00 **Matrix: Solid**

Date Received: 03/21/24 08:50

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 01:17	1
Toluene	ND		0.0020	mg/Kg		03/22/24 14:52	03/23/24 01:17	1
Ethylbenzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 01:17	1
m-Xylene & p-Xylene	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 01:17	1
o-Xylene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 01:17	1
Xylenes, Total	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 01:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	143	S1+	70 - 130			03/22/24 14:52	03/23/24 01:17	1
1,4-Difluorobenzene (Surr)	98		70 - 130			03/22/24 14:52	03/23/24 01:17	1

4-Bromofluorobenzene (Surr)								
	143	S1+	70 - 130			03/22/24 14:52	03/23/24 01:17	1
1,4-Difluorobenzene (Surr)	98		70 - 130			03/22/24 14:52	03/23/24 01:17	1
Method: SW846 8015B NM - Die	sel Range	organics	(DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/22/24 10:50	03/23/24 13:16	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 13:16	1
OII Range Organics (Over C28-C36)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 13:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			03/22/24 10:50	03/23/24 13:16	1
o-Terphenyl	76		70 - 130			03/22/24 10:50	03/23/24 13:16	1

Eurofins Albuquerque

03/22/24 22:00

mg/Kg

110

Chloride

Project/Site: PLU 16 Twin Wells Ranch CVB

Client Sample ID: BH24-03 2'

Date Received: 03/21/24 08:50

Date Collected: 03/19/24 14:15

Lab Sample ID: 885-1544-6

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 01:43	1
Toluene	ND		0.0020	mg/Kg		03/22/24 14:52	03/23/24 01:43	1
Ethylbenzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 01:43	1
m-Xylene & p-Xylene	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 01:43	1
o-Xylene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 01:43	1
Xylenes, Total	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 01:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130			03/22/24 14:52	03/23/24 01:43	1
1,4-Difluorobenzene (Surr)	83		70 - 130			03/22/24 14:52	03/23/24 01:43	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

nesei Kange	e Organics	(DRO) (GC)					
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
ND		50	mg/Kg		03/22/24 10:50	03/23/24 13:38	1
ND		50	mg/Kg		03/22/24 10:50	03/23/24 13:38	1
ND		50	mg/Kg		03/22/24 10:50	03/23/24 13:38	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
80		70 - 130			03/22/24 10:50	03/23/24 13:38	1
68	S1-	70 - 130			03/22/24 10:50	03/23/24 13:38	1
	Result ND ND ND ND 80	Result Qualifier ND ND ND ND %Recovery Qualifier	Result ND Qualifier RL 50 ND 50 ND 50 ND 50 %Recovery 80 Qualifier Limits 70 - 130	ND 50 mg/Kg ND 50 mg/Kg ND 50 mg/Kg %Recovery Qualifier Limits 80 70 - 130	Result ND Qualifier RL 50 Unit mg/Kg D mg/Kg ND 50 mg/Kg ND 50 mg/Kg %Recovery 80 Qualifier Limits 70 - 130	Result Qualifier RL Unit D Prepared ND 50 mg/Kg 03/22/24 10:50 ND 50 mg/Kg 03/22/24 10:50 ND 50 mg/Kg 03/22/24 10:50 %Recovery Qualifier Limits Prepared 80 70 - 130 03/22/24 10:50	Result Qualifier RL Unit D Prepared 03/22/24 10:50 Analyzed 03/23/24 13:38 ND 50 mg/Kg 03/22/24 10:50 03/23/24 13:38 ND 50 mg/Kg 03/22/24 10:50 03/23/24 13:38 %Recovery Qualifier Limits Prepared 03/22/24 10:50 Analyzed 03/22/24 10:50 80 70 - 130 03/22/24 10:50 03/23/24 13:38

Method: EPA 300.0 - Anions, I	on Chromatogi	raphy - Soluble					
Analyte	Result Qua	alifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	75	5.1	mg/Kg			03/22/24 22:05	1

Client Sample ID: BH24-04 0'

Date Collected: 03/19/24 14:30 Date Received: 03/21/24 08:50

Lab Sample ID: 885-1544-7

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 02:09	1
Toluene	0.0067		0.0020	mg/Kg		03/22/24 14:52	03/23/24 02:09	1
Ethylbenzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 02:09	1
m-Xylene & p-Xylene	0.0047	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 02:09	1
o-Xylene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 02:09	1
Xylenes, Total	0.0047	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 02:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	148	S1+	70 - 130			03/22/24 14:52	03/23/24 02:09	1
1,4-Difluorobenzene (Surr)	87		70 - 130			03/22/24 14:52	03/23/24 02:09	1

Mothod:	SW846 8015	R NM - Dige	ıl Rande ∩ı	rganics (DRO) (GC)	

Method: 344046 60136 MM - Die	esei Kange Organics (i	DRO) (GC)					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	50	mg/Kg		03/22/24 10:50	03/23/24 13:59	1
(GRO)-C6-C10							
Diesel Range Organics (Over	ND	50	mg/Kg		03/22/24 10:50	03/23/24 13:59	1
C10-C28)							
Oll Range Organics (Over C28-C36)	ND	50	mg/Kg		03/22/24 10:50	03/23/24 13:59	1

Project/Site: PLU 16 Twin Wells Ranch CVB

Client Sample ID: BH24-04 0' Lab Sample ID: 885-1544-7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	03/22/24 10:50	03/23/24 13:59	1
o-Terphenyl	74		70 - 130	03/22/24 10:50	03/23/24 13:59	1

Method: EPA 300.0 - Anions, Id	on Chromatogra	phy - Soluble					
Analyte	Result Qualit	ifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100	5.0	mg/Kg			03/22/24 22:19	1

Client Sample ID: BH24-04 2'

Lab Sample ID: 885-1544-8

Date Collected: 03/19/24 14:45

Matrix: Solid

Date Received: 03/21/24 08:50

Method: SW846 8021B - \	/olatile Organic	Compoun	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 02:36	1
Toluene	ND		0.0020	mg/Kg		03/22/24 14:52	03/23/24 02:36	1
Ethylbenzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 02:36	1
m-Xylene & p-Xylene	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 02:36	1
o-Xylene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 02:36	1
Xylenes, Total	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 02:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130	03/22/24 14:52	03/23/24 02:36	1
1,4-Difluorobenzene (Surr)	97		70 - 130	03/22/24 14:52	03/23/24 02:36	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/22/24 10:50	03/23/24 14:20	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 14:20	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 14:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			03/22/24 10:50	03/23/24 14:20	1
o-Terphenyl	76		70 - 130			03/22/24 10:50	03/23/24 14:20	1

Method: EPA 300.0 - Anions, Id	on Chromat	ography -	Soluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90		5.0	mg/Kg			03/22/24 22:24	1

Client Sample ID: BH24-04 4'

Date Collected: 03/19/24 15:00

Lab Sample ID: 885-1544-9

Matrix: Solid

Date Received: 03/21/24 08:50

Method: SW846 8021B - V	olatile Organic	Compound	ls (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 03:02	1
Toluene	ND		0.0020	mg/Kg		03/22/24 14:52	03/23/24 03:02	1
Ethylbenzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 03:02	1
m-Xylene & p-Xylene	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 03:02	1
o-Xylene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 03:02	1
Xylenes, Total	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 03:02	1

Eurofins Albuquerque

2

3

5

6

8

10

Project/Site: PLU 16 Twin Wells Ranch CVB

Client Sample ID: BH24-04 4'

Date Collected: 03/19/24 15:00 Date Received: 03/21/24 08:50 Lab Sample ID: 885-1544-9

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	154	S1+	70 - 130	03/22/24 14:52	03/23/24 03:02	1
1,4-Difluorobenzene (Surr)	83		70 - 130	03/22/24 14:52	03/23/24 03:02	1

Surrogate	%Recovery 0	Quaimer	Limits	Prepared	Analyzea	DII Fac
4-Bromofluorobenzene (Surr)	154	S1+	70 - 130	03/22/24 14:52	03/23/24 03:02	1
1,4-Difluorobenzene (Surr)	83		70 - 130	03/22/24 14:52	03/23/24 03:02	1
		.	(DDO) (OO			

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/22/24 10:50	03/23/24 14:42	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 14:42	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 14:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			03/22/24 10:50	03/23/24 14:42	1
o-Terphenyl	80		70 - 130			03/22/24 10:50	03/23/24 14:42	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result Qualit	ifier RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	99	5.0	mg/Kg			03/22/24 22:39	1		

Lab Sample ID: 885-1544-10 Client Sample ID: BH24-05 0'

Date Collected: 03/19/24 15:15 Date Received: 03/21/24 08:50

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 03:28	1
Toluene	ND		0.0020	mg/Kg		03/22/24 14:52	03/23/24 03:28	1
Ethylbenzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 03:28	1
m-Xylene & p-Xylene	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 03:28	1
o-Xylene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 03:28	1
Xylenes, Total	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 03:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		S1+	70 - 130			03/22/24 14:52	03/23/24 03:28	1
1.4-Difluorobenzene (Surr)	115		70 - 130			03/22/24 14:52	03/23/24 03:28	1

4-Bromofluorobenzene (Surr)	175	S1+	70 - 130			03/22/24 14:52	03/23/24 03:28	1
1,4-Difluorobenzene (Surr)	115		70 - 130			03/22/24 14:52	03/23/24 03:28	1
Method: SW846 8015B NM - I	Diesel Range	Organics	(DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/22/24 10:50	03/23/24 15:03	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 15:03	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 15:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			03/22/24 10:50	03/23/24 15:03	1
o-Terphenyl	75		70 - 130			03/22/24 10:50	03/23/24 15:03	1
Method: EPA 300.0 - Anions,	Ion Chromat	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		5.0	mg/Kg			03/22/24 22:44	1

Project/Site: PLU 16 Twin Wells Ranch CVB

Client Sample ID: BH24-05 2'

Lab Sample ID: 885-1544-11

Matrix: Solid

Date Collected: 03/19/24 15:30 Date Received: 03/21/24 08:50

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 05:13	1
Toluene	ND		0.0020	mg/Kg		03/22/24 14:52	03/23/24 05:13	1
Ethylbenzene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 05:13	1
m-Xylene & p-Xylene	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 05:13	1
o-Xylene	ND	*+	0.0020	mg/Kg		03/22/24 14:52	03/23/24 05:13	1
Xylenes, Total	ND	*+	0.0040	mg/Kg		03/22/24 14:52	03/23/24 05:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130			03/22/24 14:52	03/23/24 05:13	1
1,4-Difluorobenzene (Surr)	71		70 - 130			03/22/24 14:52	03/23/24 05:13	1
Method: SW846 8015B NM - [_	_		Unit	n	Propared	Analyzed	Dil Fa
: Mathad: SW8/6 8015R NM - [Diesel Pange	Organics	(DBO) (GC)					
Analyte	Result	Organics Qualifier	RL	Unit ma/Ka	<u>D</u>	Prepared 03/22/24 10:50	Analyzed	Dil Fac
Analyte Gasoline Range Organics	_	_		Unit mg/Kg	_ <u>D</u>	Prepared 03/22/24 10:50		Dil Fac
Analyte	Result	_	RL		_ <u>D</u>	03/22/24 10:50		Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	Result	_	RL 50	mg/Kg	<u>D</u>	03/22/24 10:50	03/23/24 15:46	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	_	RL 50	mg/Kg	_ <u>D</u>	03/22/24 10:50 03/22/24 10:50	03/23/24 15:46	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result ND ND	Qualifier	FL 50	mg/Kg	<u>D</u>	03/22/24 10:50 03/22/24 10:50	03/23/24 15:46 03/23/24 15:46	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result ND ND	Qualifier	FIL 50 50 50	mg/Kg	<u>D</u>	03/22/24 10:50 03/22/24 10:50 03/22/24 10:50	03/23/24 15:46 03/23/24 15:46 03/23/24 15:46 Analyzed	1 1 Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate	Result ND ND ND ND %Recovery	Qualifier	8L 50 50 50 Limits	mg/Kg	<u> </u>	03/22/24 10:50 03/22/24 10:50 03/22/24 10:50 Prepared	03/23/24 15:46 03/23/24 15:46 03/23/24 15:46 Analyzed 03/23/24 15:46	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result ND ND ND 96 87 87 87 87 87 87 87 87 87 87 87 87 87	Qualifier Qualifier	50 50 50 Limits 70 - 130 70 - 130	mg/Kg	<u>D</u>	03/22/24 10:50 03/22/24 10:50 03/22/24 10:50 Prepared 03/22/24 10:50	03/23/24 15:46 03/23/24 15:46 03/23/24 15:46 Analyzed 03/23/24 15:46	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result ND ND ND %Recovery 91 76	Qualifier Qualifier	50 50 50 Limits 70 - 130 70 - 130	mg/Kg	<u>D</u>	03/22/24 10:50 03/22/24 10:50 03/22/24 10:50 Prepared 03/22/24 10:50	03/23/24 15:46 03/23/24 15:46 03/23/24 15:46 Analyzed 03/23/24 15:46	Dil Fac

Released to Imaging: 5/22/2024 2:49:22 PM

2

4

6

8

10

Project/Site: PLU 16 Twin Wells Ranch CVB

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-76342/5-A

Matrix: Solid

Analysis Batch: 76353

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 76342

	MB MB						
Analyte	Result Qualific	er RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	0.0020	mg/Kg		03/22/24 14:52	03/22/24 23:06	1
Toluene	ND	0.0020	mg/Kg		03/22/24 14:52	03/22/24 23:06	1
Ethylbenzene	ND	0.0020	mg/Kg		03/22/24 14:52	03/22/24 23:06	1
m-Xylene & p-Xylene	ND	0.0040	mg/Kg		03/22/24 14:52	03/22/24 23:06	1
o-Xylene	ND	0.0020	mg/Kg		03/22/24 14:52	03/22/24 23:06	1
Xylenes, Total	ND	0.0040	mg/Kg		03/22/24 14:52	03/22/24 23:06	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	03/22/24 14:52	03/22/24 23:06	1
1,4-Difluorobenzene (Surr)	93		70 - 130	03/22/24 14:52	03/22/24 23:06	1

Lab Sample ID: LCS 880-76342/1-A

Matrix: Solid

Analysis Batch: 76353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 76342

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.113		mg/Kg		113	70 - 130	
Toluene	0.100	0.104		mg/Kg		104	70 - 130	
Ethylbenzene	0.100	0.101		mg/Kg		101	70 - 130	
m-Xylene & p-Xylene	0.200	0.206		mg/Kg		103	70 - 130	
o-Xylene	0.100	0.112		mg/Kg		112	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	152	S1+	70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-76342/2-A

Matrix: Solid

Analysis Batch: 76353

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 76342

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.145	*+	mg/Kg		145	70 - 130	24	35
Toluene	0.100	0.128		mg/Kg		128	70 - 130	21	35
Ethylbenzene	0.100	0.136	*+	mg/Kg		136	70 - 130	29	35
m-Xylene & p-Xylene	0.200	0.286	*+	mg/Kg		143	70 - 130	32	35
o-Xylene	0.100	0.140	*+	mg/Kg		140	70 - 130	23	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	156	S1+	70 - 130
1.4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 885-1544-1 MS

Matrix: Solid

Analysis Batch: 76353

Client Sample ID: BH24-01 0'

Prep Type: Total/NA

Prep Batch: 76342

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND	*+	0.0996	0.121		mg/Kg		121	70 - 130	
Toluene	ND		0.0996	0.117		mg/Kg		117	70 - 130	

Eurofins Albuquerque

Page 14 of 30

Client Sample ID: BH24-01 0'

Client Sample ID: BH24-01 0'

Prep Type: Total/NA

Client: Vertex Job ID: 885-1544-1

Project/Site: PLU 16 Twin Wells Ranch CVB

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 885-1544-1 MS **Matrix: Solid**

Analysis Batch: 76353						Prep Batch: 76342				
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	ND	*+	0.0996	0.113		mg/Kg		114	70 - 130	
m-Xylene & p-Xylene	ND	*+	0.199	0.235		mg/Kg		118	70 - 130	
o-Xylene	ND	*+	0.0996	0.116		mg/Kg		117	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 134 S1+ 70 - 130 1,4-Difluorobenzene (Surr) 70 - 130 92

Lab Sample ID: 885-1544-1 MSD

Matrix: Solid Prep Type: Total/NA Analysis Batch: 76353 Prep Batch: 76342 Comple Comple

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND	*+	0.100	0.130		mg/Kg		129	70 - 130	7	35
Toluene	ND		0.100	0.120		mg/Kg		120	70 - 130	3	35
Ethylbenzene	ND	*+	0.100	0.119		mg/Kg		118	70 - 130	5	35
m-Xylene & p-Xylene	ND	*+	0.200	0.247		mg/Kg		123	70 - 130	5	35
o-Xylene	ND	*+	0.100	0.120		mg/Kg		119	70 - 130	3	35

MSD MSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 144 S1+ 70 - 130 1,4-Difluorobenzene (Surr) 120 70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-76282/1-A **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA Prep Batch: 76282

Analysis Batch: 76378

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/22/24 10:50	03/23/24 08:32	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 08:32	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/22/24 10:50	03/23/24 08:32	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 142 S1+ 70 - 130 03/22/24 10:50 03/23/24 08:32 70 - 130 03/22/24 10:50 03/23/24 08:32 o-Terphenyl 134 S1+

Lab Sample ID: LCS 880-76282/2-A

Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA Prep Batch: 76282 **Analysis Batch: 76378**

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1090		mg/Kg		109	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	888		mg/Kg		89	70 - 130	
C10-C28)								

Project/Site: PLU 16 Twin Wells Ranch CVB

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-76282/2-A **Matrix: Solid**

Analysis Batch: 76378

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 76282

LCS LCS %Recovery Qualifier Surrogate Limits 1-Chlorooctane 120 70 - 130 o-Terphenyl 116 70 - 130

Lab Sample ID: LCSD 880-76282/3-A

Matrix: Solid

Analysis Batch: 76378

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 76282

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics 1000 1140 mg/Kg 114 70 - 130 5 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 978 mg/Kg 98 70 - 130 10 20 C10-C28)

LCSD LCSD

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 83 70 - 130 70 - 130 o-Terphenyl 82

Lab Sample ID: 885-1544-1 MS

Matrix: Solid

Analysis Batch: 76378

Client Sample ID: BH24-01 0'

Prep Type: Total/NA

Prep Batch: 76282

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Limits Analyte Unit D %Rec ND F2 1000 Gasoline Range Organics 861 mg/Kg 84 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over ND 1000 986 mg/Kg 99 70 - 130 C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 103 70 - 130 o-Terphenyl 78 70 - 130

Lab Sample ID: 885-1544-1 MSD

Released to Imaging: 5/22/2024 2:49:22 PM

Matrix: Solid

Analysis Batch: 76378

Client Sample ID: BH24-01 0'

%Rec **RPD** Limits **RPD** Limit

Result Qualifier Added Result Qualifier **Analyte** Unit %Rec Gasoline Range Organics ND F2 1000 1230 F2 120 70 - 130 35 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over ND 1000 914 mg/Kg 91 70 - 130 8 20

MSD MSD

Spike

C10-C28)

MSD MSD

Sample Sample

%Recovery Qualifier Limits Surrogate 1-Chlorooctane 93 70 - 130 71 o-Terphenyl 70 - 130

Eurofins Albuquerque

Prep Type: Total/NA Prep Batch: 76282

Project/Site: PLU 16 Twin Wells Ranch CVB

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-76321/1-A **Client Sample ID: Method Blank Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 76356

MB MB Analyte Result Qualifier RL Unit D Analyzed Dil Fac Prepared Chloride 5.0 03/22/24 20:43 ND mg/Kg

Lab Sample ID: LCS 880-76321/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 76356

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec

Limits Chloride 250 235 90 - 110 mg/Kg 94

Lab Sample ID: LCSD 880-76321/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 76356

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Limits **RPD** Limit Unit %Rec Chloride 250 236 94 20 mg/Kg

Lab Sample ID: 885-1544-6 MS Client Sample ID: BH24-03 2' **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 76356

Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 253 343 90 - 110 75 mg/Kg 106

Lab Sample ID: 885-1544-6 MSD Client Sample ID: BH24-03 2'

Matrix: Solid

Analysis Batch: 76356

MSD MSD RPD Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 75 253 343 106 90 - 110 20 mg/Kg 0

Eurofins Albuquerque

Prep Type: Soluble

QC Association Summary

Client: Vertex Job ID: 885-1544-1

Project/Site: PLU 16 Twin Wells Ranch CVB

GC VOA

Prep Batch: 76342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1544-1	BH24-01 0'	Total/NA	Solid	5035	
885-1544-2	BH24-01 2'	Total/NA	Solid	5035	
885-1544-3	BH24-02 0'	Total/NA	Solid	5035	
885-1544-4	BH24-02 2'	Total/NA	Solid	5035	
885-1544-5	BH24-03 0'	Total/NA	Solid	5035	
885-1544-6	BH24-03 2'	Total/NA	Solid	5035	
885-1544-7	BH24-04 0'	Total/NA	Solid	5035	
885-1544-8	BH24-04 2'	Total/NA	Solid	5035	
885-1544-9	BH24-04 4'	Total/NA	Solid	5035	
885-1544-10	BH24-05 0'	Total/NA	Solid	5035	
885-1544-11	BH24-05 2'	Total/NA	Solid	5035	
MB 880-76342/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-76342/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-76342/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
885-1544-1 MS	BH24-01 0'	Total/NA	Solid	5035	
885-1544-1 MSD	BH24-01 0'	Total/NA	Solid	5035	

Analysis Batch: 76353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1544-1	BH24-01 0'	Total/NA	Solid	8021B	76342
885-1544-2	BH24-01 2'	Total/NA	Solid	8021B	76342
885-1544-3	BH24-02 0'	Total/NA	Solid	8021B	76342
885-1544-4	BH24-02 2'	Total/NA	Solid	8021B	76342
885-1544-5	BH24-03 0'	Total/NA	Solid	8021B	76342
885-1544-6	BH24-03 2'	Total/NA	Solid	8021B	76342
885-1544-7	BH24-04 0'	Total/NA	Solid	8021B	76342
885-1544-8	BH24-04 2'	Total/NA	Solid	8021B	76342
885-1544-9	BH24-04 4'	Total/NA	Solid	8021B	76342
885-1544-10	BH24-05 0'	Total/NA	Solid	8021B	76342
885-1544-11	BH24-05 2'	Total/NA	Solid	8021B	76342
MB 880-76342/5-A	Method Blank	Total/NA	Solid	8021B	76342
LCS 880-76342/1-A	Lab Control Sample	Total/NA	Solid	8021B	76342
LCSD 880-76342/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	76342
885-1544-1 MS	BH24-01 0'	Total/NA	Solid	8021B	76342
885-1544-1 MSD	BH24-01 0'	Total/NA	Solid	8021B	76342

GC Semi VOA

Prep Batch: 76282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1544-1	BH24-01 0'	Total/NA	Solid	8015NM Prep	
885-1544-2	BH24-01 2'	Total/NA	Solid	8015NM Prep	
885-1544-3	BH24-02 0'	Total/NA	Solid	8015NM Prep	
885-1544-4	BH24-02 2'	Total/NA	Solid	8015NM Prep	
885-1544-5	BH24-03 0'	Total/NA	Solid	8015NM Prep	
885-1544-6	BH24-03 2'	Total/NA	Solid	8015NM Prep	
885-1544-7	BH24-04 0'	Total/NA	Solid	8015NM Prep	
885-1544-8	BH24-04 2'	Total/NA	Solid	8015NM Prep	
885-1544-9	BH24-04 4'	Total/NA	Solid	8015NM Prep	
885-1544-10	BH24-05 0'	Total/NA	Solid	8015NM Prep	
885-1544-11	BH24-05 2'	Total/NA	Solid	8015NM Prep	

Eurofins Albuquerque

72

3/26/2024

QC Association Summary

Client: Vertex Job ID: 885-1544-1

Project/Site: PLU 16 Twin Wells Ranch CVB

GC Semi VOA (Continued)

Prep Batch: 76282 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-76282/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-76282/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-76282/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
885-1544-1 MS	BH24-01 0'	Total/NA	Solid	8015NM Prep	
885-1544-1 MSD	BH24-01 0'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 76378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1544-1	BH24-01 0'	Total/NA	Solid	8015B NM	76282
885-1544-2	BH24-01 2'	Total/NA	Solid	8015B NM	76282
885-1544-3	BH24-02 0'	Total/NA	Solid	8015B NM	76282
885-1544-4	BH24-02 2'	Total/NA	Solid	8015B NM	76282
885-1544-5	BH24-03 0'	Total/NA	Solid	8015B NM	76282
885-1544-6	BH24-03 2'	Total/NA	Solid	8015B NM	76282
885-1544-7	BH24-04 0'	Total/NA	Solid	8015B NM	76282
885-1544-8	BH24-04 2'	Total/NA	Solid	8015B NM	76282
885-1544-9	BH24-04 4'	Total/NA	Solid	8015B NM	76282
885-1544-10	BH24-05 0'	Total/NA	Solid	8015B NM	76282
885-1544-11	BH24-05 2'	Total/NA	Solid	8015B NM	76282
MB 880-76282/1-A	Method Blank	Total/NA	Solid	8015B NM	76282
LCS 880-76282/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	76282
LCSD 880-76282/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	76282
885-1544-1 MS	BH24-01 0'	Total/NA	Solid	8015B NM	76282
885-1544-1 MSD	BH24-01 0'	Total/NA	Solid	8015B NM	76282

HPLC/IC

Leach Batch: 76321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1544-1	BH24-01 0'	Soluble	Solid	DI Leach	
885-1544-2	BH24-01 2'	Soluble	Solid	DI Leach	
885-1544-3	BH24-02 0'	Soluble	Solid	DI Leach	
885-1544-4	BH24-02 2'	Soluble	Solid	DI Leach	
885-1544-5	BH24-03 0'	Soluble	Solid	DI Leach	
885-1544-6	BH24-03 2'	Soluble	Solid	DI Leach	
885-1544-7	BH24-04 0'	Soluble	Solid	DI Leach	
885-1544-8	BH24-04 2'	Soluble	Solid	DI Leach	
885-1544-9	BH24-04 4'	Soluble	Solid	DI Leach	
885-1544-10	BH24-05 0'	Soluble	Solid	DI Leach	
885-1544-11	BH24-05 2'	Soluble	Solid	DI Leach	
MB 880-76321/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-76321/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-76321/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-1544-6 MS	BH24-03 2'	Soluble	Solid	DI Leach	
885-1544-6 MSD	BH24-03 2'	Soluble	Solid	DI Leach	

Analysis Batch: 76356

Lab Sample ID 885-1544-1	Client Sample ID BH24-01 0'	Prep Type Soluble	Matrix Solid	Method 300.0	Prep Batch 76321
885-1544-2	BH24-01 2'	Soluble	Solid	300.0	76321
885-1544-3	BH24-02 0'	Soluble	Solid	300.0	76321

Eurofins Albuquerque

Page 19 of 30

2

4

6

_

9

1 4

12

. .

QC Association Summary

Client: Vertex Job ID: 885-1544-1

Project/Site: PLU 16 Twin Wells Ranch CVB

HPLC/IC (Continued)

Analysis Batch: 76356 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1544-4	BH24-02 2'	Soluble	Solid	300.0	76321
885-1544-5	BH24-03 0'	Soluble	Solid	300.0	76321
885-1544-6	BH24-03 2'	Soluble	Solid	300.0	76321
885-1544-7	BH24-04 0'	Soluble	Solid	300.0	76321
885-1544-8	BH24-04 2'	Soluble	Solid	300.0	76321
885-1544-9	BH24-04 4'	Soluble	Solid	300.0	76321
885-1544-10	BH24-05 0'	Soluble	Solid	300.0	76321
885-1544-11	BH24-05 2'	Soluble	Solid	300.0	76321
MB 880-76321/1-A	Method Blank	Soluble	Solid	300.0	76321
LCS 880-76321/2-A	Lab Control Sample	Soluble	Solid	300.0	76321
LCSD 880-76321/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	76321
885-1544-6 MS	BH24-03 2'	Soluble	Solid	300.0	76321
885-1544-6 MSD	BH24-03 2'	Soluble	Solid	300.0	76321

4

6

7

ŏ

9

Client: Vertex

Client Sample ID: BH24-01 0'

Date Collected: 03/19/24 13:00 Date Received: 03/21/24 08:50 Lab Sample ID: 885-1544-1

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76342	MNR	EET MID	03/22/24 14:52
Total/NA	Analysis	8021B		1	76353	MNR	EET MID	03/22/24 23:32
Total/NA	Prep	8015NM Prep			76282	EL	EET MID	03/22/24 10:50
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/23/24 11:06
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 21:41

Client Sample ID: BH24-01 2'

Date Collected: 03/19/24 13:15 Date Received: 03/21/24 08:50 Lab Sample ID: 885-1544-2

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76342	MNR	EET MID	03/22/24 14:52
Total/NA	Analysis	8021B		1	76353	MNR	EET MID	03/22/24 23:58
Total/NA	Prep	8015NM Prep			76282	EL	EET MID	03/22/24 10:50
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/23/24 12:12
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 21:46

Client Sample ID: BH24-02 0'

Date Collected: 03/19/24 13:30 Date Received: 03/21/24 08:50 Lab Sample ID: 885-1544-3

Matrix: Solid

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76342	MNR	EET MID	03/22/24 14:52
Total/NA	Analysis	8021B		1	76353	MNR	EET MID	03/23/24 00:24
Total/NA	Prep	8015NM Prep			76282	EL	EET MID	03/22/24 10:50
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/23/24 12:34
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 21:50

Client Sample ID: BH24-02 2'

Date Collected: 03/19/24 13:45

Date Received: 03/21/24 08:50

Lab	Sample	ID:	885-1544-4
			Market Control

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76342	MNR	EET MID	03/22/24 14:52
Total/NA	Analysis	8021B		1	76353	MNR	EET MID	03/23/24 00:51
Total/NA	Prep	8015NM Prep			76282	EL	EET MID	03/22/24 10:50
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/23/24 12:55
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 21:55

Client Sample ID: BH24-03 0'

Date Collected: 03/19/24 14:00 Date Received: 03/21/24 08:50

Client: Vertex

Lab Sample ID: 885-1544-5

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76342	MNR	EET MID	03/22/24 14:52
Total/NA	Analysis	8021B		1	76353	MNR	EET MID	03/23/24 01:17
Total/NA	Prep	8015NM Prep			76282	EL	EET MID	03/22/24 10:50
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/23/24 13:16
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 22:00

Client Sample ID: BH24-03 2'

Date Collected: 03/19/24 14:15 Date Received: 03/21/24 08:50 Lab Sample ID: 885-1544-6

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76342	MNR	EET MID	03/22/24 14:52
Total/NA	Analysis	8021B		1	76353	MNR	EET MID	03/23/24 01:43
Total/NA	Prep	8015NM Prep			76282	EL	EET MID	03/22/24 10:50
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/23/24 13:38
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 22:05

Client Sample ID: BH24-04 0'

Date Collected: 03/19/24 14:30

Date Received: 03/21/24 08:50

Lab Sample ID: 885-1544-7

Matrix: Solid

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76342	MNR	EET MID	03/22/24 14:52
Total/NA	Analysis	8021B		1	76353	MNR	EET MID	03/23/24 02:09
Total/NA	Prep	8015NM Prep			76282	EL	EET MID	03/22/24 10:50
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/23/24 13:59
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 22:19

Client Sample ID: BH24-04 2'

Date Collected: 03/19/24 14:45

Date Received: 03/21/24 08:50

Lab	Sample	ID:	885-1544-8

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76342	MNR	EET MID	03/22/24 14:52
Total/NA	Analysis	8021B		1	76353	MNR	EET MID	03/23/24 02:36
Total/NA	Prep	8015NM Prep			76282	EL	EET MID	03/22/24 10:50
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/23/24 14:20
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 22:24

Eurofins Albuquerque

2

4

6

8

10

Project/Site: PLU 16 Twin Wells Ranch CVB

Client Sample ID: BH24-04 4'

Date Collected: 03/19/24 15:00 Date Received: 03/21/24 08:50 Lab Sample ID: 885-1544-9

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76342	MNR	EET MID	03/22/24 14:52
Total/NA	Analysis	8021B		1	76353	MNR	EET MID	03/23/24 03:02
Total/NA	Prep	8015NM Prep			76282	EL	EET MID	03/22/24 10:50
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/23/24 14:42
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 22:39

Client Sample ID: BH24-05 0'

Date Collected: 03/19/24 15:15

Date Received: 03/21/24 08:50

Lab Sample ID: 885-1544-10

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76342	MNR	EET MID	03/22/24 14:52
Total/NA	Analysis	8021B		1	76353	MNR	EET MID	03/23/24 03:28
Total/NA	Prep	8015NM Prep			76282	EL	EET MID	03/22/24 10:50
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/23/24 15:03
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 22:44

Client Sample ID: BH24-05 2'

Date Collected: 03/19/24 15:30 Date Received: 03/21/24 08:50

: BH24-05 2' Lab Sample ID: 885-1544-11 9/24 15:30 Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76342	MNR	EET MID	03/22/24 14:52
Total/NA	Analysis	8021B		1	76353	MNR	EET MID	03/23/24 05:13
Total/NA	Prep	8015NM Prep			76282	EL	EET MID	03/22/24 10:50
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/23/24 15:46
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 22:48

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex Job ID: 885-1544-1

Project/Site: PLU 16 Twin Wells Ranch CVB

Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

4

3

4

5

8

9

11

Method Summary

Client: Vertex Job ID: 885-1544-1

Project/Site: PLU 16 Twin Wells Ranch CVB

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Pa	
Page	
age	
Jage 72	
age	
age 72 of	
Jage 72	

Chain-of-Custody Record			_	Turn-Around Time: HALL ENVIRONME TO DO LA																		
Client:	vert	ex C>	(Ta)	四 5	Project Name: PLN 16 Twin well's Ram 4h CVB								4									
					Project Name: PLN 16 Twin wells Ran Ch CVB				www.hallenvironmental.com													
Mailing Address On File			-				4901 Hawkins NE - Albuquerque, NM 87109 885-1544 COC															
)	·	i		Project #: 24 &- 00 197				Tel. 505-345-3975 Fax 505-345-4107														
Phone	#: 0n f	ile		COST	Contein n	unser: 224	5/3/001						Α	maly	/sis	Req	uest					
email o	or Fax#	Scartt	ar Q Vertox. La	Proje	ect Mana	iger Sally Ca	Lttaz	$\widehat{\Xi}$	Ô					SO4			int)					
Š	Package				Scal	·ttaiocverte	x,ca	(802	/ MF	PCB's		MS		PO4, §			Abse		ļ			
□ Star			☐ Level 4 (Full Validation)				<u> </u>	TMB's (8021)	RO	2 P(_	8270SIMS		2, P(nt//					
Accred □ NEI		☐ Az Co☐ Othe	ompliance	Sam On lo		M1 Wadeish Yes	J. No. W.		0/C	808,	1.1			NO ₂ ,		2	res					
	_AC D (Type) ₋	□ Ottle			Coolers:	(□ No Yog1	3E /	GRC	ides/	d 50	10 or	tals	03,		0	m (F					
	T			Cool	er Temp	(including CF): O. C	940.1=1.0 (°C)	MTBE /	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082	EDB (Method 504.1)	PAHs by 8310	RCRA 8 Metals	Q F, Br, NO ₃ ,	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)					
1				Cont	ainer	Preservative	HEAL No.	BTEX/	1:80	1 Pe	<u>₹</u>	ds b	\$	Р, Е	V) 0	s) 0	S S		1			
a Date	Tıme	Matrıx	Sample Name			Type	Time this you	BTE	TP	808		PA	2 R	đ	826	827	Tota					
003/19/24	13:00	50.1	BHZ4-01 Oft	40.	卫劢		-(1						\bigvee								
of 3	13(15	j	BH 24-01 2-Ft	1			-2							1								
	13:30		8429-02 aft				-3															
	13:45		BH24-02 Qft	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			ـ لا															
	14:00		BH29-03 0 ft				-5															
	14:15		BH24-03 2-FT				-6															
	14:30		BH21-69 Oft				<u>-</u> آ															
	14:45		B#21-04 2FT				-8															
	15:00		BH24-04 4ft				-9															
	15(15		BH24-05 Oft				-IO															
V	15:30	Ψ	BH24-05 Z+T	V			- il	₩	*					9/								
D-t-	7:	D-G-wist		D	ved by	Via	Deta Time															
Bate,	Time	Reinquisi	ned by wgatt walle; a		•		Black Time	Ren	nark	s: 🖨	£		1	v 1 –				- -				
2 Date	7 7 Time	Relinquish	ned by	Recei	WWW ved by	<u>∕~</u> γ) Via	Date Time			(ر	,: W	wad	10.5	L G	U)e	171	ek,C	بنو				
Date North	1900								יגג	45	131	noi	(

Ver. 06/08/2021

oubsul

Eurofins Albuquerque

4901 Hawkins NE

	2014-848-9
Chain of Custody F	

amiT\atsC

51:61 VS(IS SI)SY Company company sejjudnjepeq pl. tethod of Shipment: əwii Date Empty Kit Relinquished by: Special Instructions/QC Requirements Deliverable Requested I II II IV Other (specify) Primary Deliverable Rank 2 Months Disposal By Lab Return To Client Sample Disposal (A fee may be assessed it samples are retained longer than 1 month) noiseofilication dentification creditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody afterting South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody afterting South Central LLC attention immediately If all requested accreditations are current to date return the signed accreditation of the company of t to see not currently maintain accreditation in the State of Origin listed above for analyzis/lests/matrix being analyzed the samples must be stripped back to the Eurofina Environment Testing South Centre in State of Origin listed above for analyzis/lests/matrix being analyzed the samples must be stripped back to the Eurofina Environment Testing South Centre in State of Origin listed above to the State of Origin listed and original listed and origin listed and original listed and origin Jote Since Isboratory accreditations are subject to change. Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon our subcontract Isboratories. This sample shipment is forwarded under chain-of-custody. If the Χ Χ Χ 3/19/24 BH54-04 4, (882-1244-9) 12 00 Mountain Χ Χ Χ Solid 3/18/54 BH24-04 2' (885-1544-8) 97 7l Mountain Χ Χ Solid 3/19/24 BH24-04 0, (882-1244-7) 14 30 Mountain Χ Χ Solid 3/19/24 BH24-03 S. (882-1244-6) 9171 Mountain Χ Χ Solid 3/19/24 BH24-03 0' (885-1544-5) 14 00 Χ Solid 3/19/24 BH24-02 2' (885-1544-4) 1345 Mountain Χ Solid 3/19/24 BH24-02 0, (886-1544-3) 1330 Mountain Х Х Χ 3/19/24 8H24-01 2' (885-1544-2) Mountain Х Solid 3/18/54 BH24-01 0. (885-1544-1) 13 00 Preservation Code: Special Instructions/Note: G=grab) BT=Tissue, A=Air Sample Date Sample Identification - Client ID (Lab ID) 8021B/5035A_M_Calc BTEX 8015MOD_NM/8015NM_S_Prep Full TPH (C=comb) Sample 'pijos=S θdγŢ MS/MSD (Yes Sample Matrix Z ofher (specify) 97210388 PLU 16 Twin Wells Ranch CVB EDA :# Joe(o) roject Name. K EDTA 2-4 Hq W DI Water V MCAA ICG :# ON U Acetone Ascorbic Acid T TSP Dodecahydrate 32-704-5440(Tel) G Amchlor \$ HSSO4 R Na2S2O3 E NaHSO4 10767 XT Q Na2SO3 Nitric Acid diz eters P Na2O4S C Zn Acetate SOSNA O Midland HOSN 8 TAT Requested (days). HCF M Hexsne Analysis Requested 4202/72/8 211 W Florida Ave reservation Codes bete Requested NELAP - Oregon NELAP - Texas State - New Mexico 1-4451-688 Lucins Environment Testing South Centr ccreditations Required (See note): Page 1 of 2 New Mexico andy freeman@et.eurofinsus com Shipping/Receiving State of Origin 1641-988 Freeman Andy Client Information (Sub Contract Lab) Carrier Tracking No(s) ampier Phone 505-345-3975 Fax 509 Environment Testing Albuquerque MM 87109 Record suitorus 💸

Сотрапу

Company

Sooler Temperature(s) °C and Other Remarks

emiT\eta(

Received by OCD: 5/9/2024 12:00:31 AM

ON ∆ seY ∆

Custody Seals Intact:

elinquished by:

Custody Seal No

Page 73

Environment Testing

🕴 snifornə 💸

Chain of Custody Record

Phone 505-345-3975 Fax 505-345-4107 Albuquerque NM 87109

4901 Hawkins NE

Eurofins Albuquerque

						٠,	watks	лег Ке	nd Ott	s ⊃° (s)eını	npera	neT 1	Soole							Custody Seal No	Custody Seals Intact: △ Yes △ No
Сотралу			:ә	miT\ətsC								./\$	ved b	кесе			Сотрапу			:emiT\asc		
fundura														\)əte(Limo.	1	seljudnisped py.
Сотралу			Ә	miT\əJsC	}		_\v	$\sqrt{}$	1111	7/	1/	^^) Down	ЭрэЯ	 		Company	-51:1)/ hz	Jate/Time:		elinquished by:
Сотрапу	<u> </u>			miT\ətsC			4	0	<u>/// '</u>	Ψ,	<i>y /</i>	V 1	pəv	Secei		_	Company	-11,1	,,,,,	Ste/Time'		(elinquished by:
				hipment:	2 to bo	Metho	<u> </u>			***********	U	W			əu	ΙŢ			Date		٨	mpty Kit Relinquished b
SULION	10 (04)				an- (G 100	str	emer	niupə	N O	O/su	oitou	nstr	cial	Sbe				iple Rank 2	rimary Delivera	II, III, IV Other (specify)	l betreable Requested I
nonch) SatinoM	ed longer than 1 n ive For	ANIBA ANIBA			у Сар И За п] 	aa.	Clier	oT (uunte	A C								heonfirmed
															-	ino n	I S CLICKS CITY	n noveombe i	in it floring			itinebl brazaH eldisso ^c
																					If one are subject to change. Eurofins Environment interin accreditation in the State of Origin listed above rought to Eurofins Environment Testing South Centr	
		,,,,,,,	1	1	1 30,	1	101,1003	1,0004		1	1 0302	ilamo	Juon	Etiber	1 1 1 1 1 1 1 1 1	atyle	ens bodiem to	nidatenwo ed	t sepsig 211 le	Lesting South Centra	T framnorivna sentional egnect to change Environment	lote: Since laboratory accredita
			_		_				.							Ш						
	_									İ												
																П						
			\top		 											H						
	~~		\dashv		+				\dashv	-					\vdash	Н						
				+	-	-			\dashv	\dashv				-	-	Н	·····					
			-			ļ								L		Ц			UIBUIDOM			
		l l				<u> </u>						Х	×	X			biloS		15 30 Mountain	3/19/24		3HS4-02 S. (882-1244-11
		ı	-			-				-		X	x	X	-	Н	- bilo2		31 31 nistanoM	3/18/54	(9H24-02 0. (882-12 44 -10
10000		\bowtie													X	X	tion Code:		><		1	
fructions/Note:	sal Isaas	Total										300_0	8021	8015	Perform	Field	O=wasteloil, (IIA=A,eussiT=T8	(C=comp, G=grab)	Sample Time	Sample Date	(Cl ds ID)	sample Identification - 0
		Number										ORGE	B/503	dow	m	FIR	W=water ,biloz=2	Type	-13			
		nber										300_ORGFM_28D/DI_LEACH Chloride	8021B/5035A_M_Calc BTEX	8015MOD_NM/8015NM_S_Prep Full TPH	MS/MSD (Yes or No)	ered	XirisM	Sample				
	Other:	of cc										ja/ai	l_Cal	015N	ISO (Sam				"		
Z other (specify)	י בחא	ntaii										LEA	вте	N.S.	Yes	ample (Yes or				#MOSS		ite. FD 16 Twin Wells Rand
8-4 Hq W smzhT Y	K EDTA	iers										CH CI	×	Prep	Î	/es c	***************************************	***************************************		:# toə[o1	4	emsN toejor
ACADON V	H Ascorbic Acid											lorid		Full	•	No				:# OA	Λ	lism:
S H2SO4	G Amchlor											Ф		₹						:# O	4	135-704-5440(Tel) hone:
Q Na2SO3 R Na2S2O3	E NaHSO4																					10797 X
SOBNSA O SAOSBN 9	otsteate A nZ - O																					Vidland State Zip
M Hexane N None	7011 1/			i_		pəı	sən	кed	SIS	Just	IA	L	<u> </u>		3.55				(se)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\)ity:
S	Preservation Codes				00000														p	ue Date Requeste		ddress 211 W Florida Ave
	982-1244-1 199#				exico				SEXE		on 996										sting South Centr	entolins Environment Tea company
	Page 2 of 2 Page 2 of 2				OO!	of Orig ix9M	WeN			woo	o sns	uijo.	ınə 1	∍@u	ешэ	_	e-Mai					Shipping/Receiving
	Z 6ረነ-988	1												qì	nA ,n	ma	Free			,youe.	(Sub Contract Lab)	Client Information
	COC No:	1		(s)d	king No	Track	Carrie	<u> </u>									q dsJ			subjet.	6	

Login Sample Receipt Checklist

Client: Vertex Job Number: 885-1544-1

List Source: Eurofins Albuquerque Login Number: 1544

List Number: 1 Creator: Lowman, Nick

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Vertex Job Number: 885-1544-1

Login Number: 1544 **List Source: Eurofins Midland** List Creation: 03/22/24 10:45 AM List Number: 2

Creator: Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carter Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220

JOB DESCRIPTION

Generated 4/18/2024 10:28:06 PM

PLU 16 Twins Wells Ranch CVB

JOB NUMBER

885-2898-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

Generated 4/18/2024 10:28:06 PM

Authorized for release by Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com (505)345-3975

3

4

5

9

IU

Client: Vertex
Project/Site: PLU 16 Twins Wells Ranch CVB

Laboratory Job ID: 885-2898-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	9
QC Association Summary	11
Lab Chronicle	13
Certification Summary	14
Chain of Custody	15
Receipt Checklists	17

4

5

7

8

1 N

Definitions/Glossary

Client: Vertex Job ID: 885-2898-1

Project/Site: PLU 16 Twins Wells Ranch CVB

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE) DL

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin) Most Probable Number MPN MQL Method Quantitation Limit

NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Albuquerque

Case Narrative

Client: Vertex Job ID: 885-2898-1

Project: PLU 16 Twins Wells Ranch CVB

Job ID: 885-2898-1 **Eurofins Albuquerque**

Job Narrative 885-2898-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 4/16/2024 7:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.7°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client: Vertex Job ID: 885-2898-1

Project/Site: PLU 16 Twins Wells Ranch CVB

Client Sample ID: BS24-01 0' Lab Sample ID: 885-2898-1

Date Collected: 04/12/24 08:45 Matrix: Solid

Date Received: 04/16/24 07:55

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 15:31	04/17/24 13:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		15 - 244			04/16/24 15:31	04/17/24 13:27	1
Method: SW846 8021B - Volat Analyte	_	Compound Qualifier	ds (GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
	_	•	• •					
Analyte	Result	•	RL		<u>D</u>			Dil Fac
Analyte Benzene	Result	•	RL 0.024	mg/Kg	<u>D</u>	04/16/24 15:31	04/17/24 13:27	Dil Fac
Analyte	Result	•	RL		<u>D</u>			Dil Fac 1 1 1
Analyte Benzene Ethylbenzene	Result ND ND	•	RL 0.024 0.048	mg/Kg mg/Kg	<u>D</u>	04/16/24 15:31 04/16/24 15:31	04/17/24 13:27 04/17/24 13:27	1 1 1 1
Analyte Benzene Ethylbenzene Toluene	Result ND ND ND	Qualifier	RL 0.024 0.048 0.048	mg/Kg mg/Kg mg/Kg	<u>D</u>	04/16/24 15:31 04/16/24 15:31 04/16/24 15:31	04/17/24 13:27 04/17/24 13:27 04/17/24 13:27	Dil Fac 1 1 1 1 1 Dil Fac

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		04/17/24 11:31	04/17/24 17:57	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/17/24 11:31	04/17/24 17:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			04/17/24 11:31	04/17/24 17:57	1

Method: EPA 300.0 - Anions, Id	on Chromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78	60	mg/Kg		04/17/24 15:19	04/17/24 21:20	20

Eurofins Albuquerque

Released to Imaging: 5/22/2024 2:49:22 PM

Client: Vertex Job ID: 885-2898-1

Project/Site: PLU 16 Twins Wells Ranch CVB

Client Sample ID: BS24-02 0' Lab Sample ID: 885-2898-2

Date Collected: 04/12/24 08:50 **Matrix: Solid** Date Received: 04/16/24 07:55

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/16/24 15:31	04/17/24 13:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		15 - 244			04/16/24 15:31	04/17/24 13:50	1
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/16/24 15:31	04/17/24 13:50	1
Ethylbenzene	ND		0.049	mg/Kg		04/16/24 15:31	04/17/24 13:50	1
Toluene	ND		0.049	mg/Kg		04/16/24 15:31	04/17/24 13:50	1
Xylenes, Total	ND		0.099	mg/Kg		04/16/24 15:31	04/17/24 13:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		39 - 146			04/16/24 15:31	04/17/24 13:50	1
Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		04/17/24 11:31	04/17/24 18:10	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/17/24 11:31	04/17/24 18:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	88		62 - 134			04/17/24 11:31	04/17/24 18:10	1
Method: EPA 300.0 - Anions, I	on Chroma	tography						
modrica: El 71 00010 7 miono, i								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client: Vertex Job ID: 885-2898-1

Project/Site: PLU 16 Twins Wells Ranch CVB

Client Sample ID: BS24-03 0' Lab Sample ID: 885-2898-3

Date Collected: 04/12/24 08:55 Matrix: Solid

Date Received: 04/16/24 07:55

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 15:31	04/17/24 14:14	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	105		15 - 244			04/16/24 15:31	04/17/24 14:14	
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		0.024	mg/Kg		04/16/24 15:31	04/17/24 14:14	
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 15:31	04/17/24 14:14	
Toluene	ND		0.048	mg/Kg		04/16/24 15:31	04/17/24 14:14	
Xylenes, Total	ND		0.096	mg/Kg		04/16/24 15:31	04/17/24 14:14	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	86		39 - 146			04/16/24 15:31	04/17/24 14:14	
Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		04/17/24 11:31	04/17/24 18:36	-
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/17/24 11:31	04/17/24 18:36	
		Qualifier	Limits			Prepared	Analyzed	Dil Fa
Surrogate	%Recovery	Qualifier						
Surrogate Di-n-octyl phthalate (Surr)	%Recovery 88	Quanner	62 - 134			04/17/24 11:31	04/17/24 18:36	
	88	<u> </u>				04/17/24 11:31	04/17/24 18:36	

60

mg/Kg

160

04/17/24 15:19 04/17/24 22:21

Released to Imaging: 5/22/2024 2:49:22 PM

Chloride

2

3

4

6

8

10

11

Client: Vertex Job ID: 885-2898-1

Project/Site: PLU 16 Twins Wells Ranch CVB

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-3391/1-A

Matrix: Solid Analysis Batch: 3497

Result Qualifier Analyte

MB MB

RL 5.0 ND

Unit mg/Kg Prepared

04/16/24 15:31 04/17/24 11:27

Client Sample ID: Lab Control Sample

70 - 130

Client Sample ID: Method Blank

Analyzed Dil Fac

Prep Type: Total/NA

Prep Batch: 3391

MB MB

4-Bromofluorobenzene (Surr)

Gasoline Range Organics [C6 - C10]

%Recovery Qualifier 111

Limits 15 - 244

Prepared 04/16/24 15:31 04/17/24 11:27

Analyzed Dil Fac

Lab Sample ID: LCS 885-3391/2-A

Matrix: Solid

Surrogate

Analysis Batch: 3497

Spike Added 25.0

LCS LCS Result Qualifier 27.4

Unit mg/Kg

D %Rec 110 %Rec Limits

Prep Type: Total/NA

Prep Batch: 3391

Analyte Gasoline Range Organics [C6 -

C10]

LCS LCS

Surrogate %Recovery Qualifier 4-Bromofluorobenzene (Surr)

229

Limits 15 - 244

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3391/1-A

Matrix: Solid

Analysis Batch: 3498

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 3391

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg	_	04/16/24 15:31	04/17/24 11:27	1
Ethylbenzene	ND		0.050	mg/Kg		04/16/24 15:31	04/17/24 11:27	1
Toluene	ND		0.050	mg/Kg		04/16/24 15:31	04/17/24 11:27	1
Xylenes, Total	ND		0.10	mg/Kg		04/16/24 15:31	04/17/24 11:27	1

MB MB

MB MB

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 39 - 146 89

Prepared Analyzed Dil Fac 04/16/24 15:31 04/17/24 11:27

Lab Sample ID: LCS 885-3391/3-A

Matrix: Solid

Analysis Batch: 3498

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3391

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	1.00	0.825		mg/Kg		82	70 - 130	
Ethylbenzene	1.00	0.857		mg/Kg		86	70 - 130	
m,p-Xylene	2.00	1.74		mg/Kg		87	70 - 130	
o-Xylene	1.00	0.859		mg/Kg		86	70 - 130	
Toluene	1.00	0.840		mg/Kg		84	70 - 130	
Xylenes, Total	3.00	2.60		mg/Kg		87	70 - 130	

LCS LCS

Surrogate %Recovery Qualifier Limits 39 - 146 4-Bromofluorobenzene (Surr) 92

Eurofins Albuquerque

Client: Vertex Job ID: 885-2898-1

Project/Site: PLU 16 Twins Wells Ranch CVB

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-3441/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 3463

Prep Batch: 3441 MB MB Prepared Result Qualifier RL Unit D Analyzed Dil Fac

Analyte 04/17/24 11:31 04/17/24 16:40 Diesel Range Organics [C10-C28] ND 10 mg/Kg Motor Oil Range Organics [C28-C40] ND 50 mg/Kg 04/17/24 11:31 04/17/24 16:40

MB MB

Surrogate %Recovery Qualifier I imite Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 97 62 - 134 04/17/24 11:31 04/17/24 16:40

Lab Sample ID: LCS 885-3441/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 3463

Prep Batch: 3441 Spike LCS LCS %Rec

Added Result Qualifier Limits **Analyte** Unit %Rec D 50.0 60 - 135 **Diesel Range Organics** 42.2 mg/Kg 84

[C10-C28]

LCS LCS

Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 102 62 - 134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-3459/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 3487

MB MB

RL Analyte Result Qualifier Unit Analyzed Dil Fac Prepared 04/17/24 15:19 04/17/24 19:19 Chloride ND 1.5 mg/Kg

Lab Sample ID: LCS 885-3459/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA**

Analysis Batch: 3487

Spike LCS LCS %Rec Added

Analyte Result Qualifier Unit D %Rec Limits Chloride 15.0 13.7 92 90 - 110 mg/Kg

Lab Sample ID: MB 885-3487/4

Matrix: Solid

Analysis Batch: 3487

MB MB

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac 0.50 04/17/24 10:06 Chloride mg/Kg

Lab Sample ID: MRL 885-3487/3

Matrix: Solid

Analysis Batch: 3487

-	Spike	MRL	MRL				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	0.500	0.530		mg/L		106	50 - 150	

Eurofins Albuquerque

Prep Batch: 3459

Prep Batch: 3459

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

QC Association Summary

Client: Vertex Job ID: 885-2898-1

Project/Site: PLU 16 Twins Wells Ranch CVB

GC VOA

Prep Batch: 3391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2898-1	BS24-01 0'	Total/NA	Solid	5030C	
885-2898-2	BS24-02 0'	Total/NA	Solid	5030C	
885-2898-3	BS24-03 0'	Total/NA	Solid	5030C	
MB 885-3391/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3391/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3391/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 3497

Lab Sample ID 885-2898-1	Client Sample ID BS24-01 0'	Prep Type Total/NA	Matrix Solid	Method 8015D	Prep Batch 3391
885-2898-2	BS24-07 0'	Total/NA	Solid	8015D	3391
885-2898-3	BS24-02 0'	Total/NA	Solid	8015D	3391
MB 885-3391/1-A	Method Blank	Total/NA	Solid	8015D	3391
LCS 885-3391/2-A	Lab Control Sample	Total/NA	Solid	8015D	3391

Analysis Batch: 3498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2898-1	BS24-01 0'	Total/NA	Solid	8021B	3391
885-2898-2	BS24-02 0'	Total/NA	Solid	8021B	3391
885-2898-3	BS24-03 0'	Total/NA	Solid	8021B	3391
MB 885-3391/1-A	Method Blank	Total/NA	Solid	8021B	3391
LCS 885-3391/3-A	Lab Control Sample	Total/NA	Solid	8021B	3391

GC Semi VOA

Prep Batch: 3441

Lab Sample ID 885-2898-1	Client Sample ID BS24-01 0'	Prep Type Total/NA	Matrix Solid	Method SHAKE	Prep Batch
885-2898-2	BS24-02 0'	Total/NA	Solid	SHAKE	
885-2898-3	BS24-03 0'	Total/NA	Solid	SHAKE	
MB 885-3441/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3441/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 3463

Lab Sample ID 885-2898-1	Client Sample ID BS24-01 0'	Prep Type Total/NA	Matrix Solid	Method 8015D	Prep Batch 3441
885-2898-2	BS24-02 0'	Total/NA	Solid	8015D	3441
885-2898-3	BS24-03 0'	Total/NA	Solid	8015D	3441
MB 885-3441/1-A	Method Blank	Total/NA	Solid	8015D	3441
LCS 885-3441/2-A	Lab Control Sample	Total/NA	Solid	8015D	3441

HPLC/IC

Prep Batch: 3459

Released to Imaging: 5/22/2024 2:49:22 PM

Lab Sample ID 885-2898-1	Client Sample ID BS24-01 0'	Prep Type Total/NA	Matrix Solid	Method 300_Prep	Prep Batch
885-2898-2	BS24-02 0'	Total/NA	Solid	300_Prep	
885-2898-3	BS24-03 0'	Total/NA	Solid	300_Prep	
MB 885-3459/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-3459/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

•

5

6

8

9

10

QC Association Summary

Job ID: 885-2898-1 Client: Vertex

Project/Site: PLU 16 Twins Wells Ranch CVB

HPLC/IC

Analysis Batch: 3487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2898-1	BS24-01 0'	Total/NA	Solid	300.0	3459
885-2898-2	BS24-02 0'	Total/NA	Solid	300.0	3459
885-2898-3	BS24-03 0'	Total/NA	Solid	300.0	3459
MB 885-3459/1-A	Method Blank	Total/NA	Solid	300.0	3459
MB 885-3487/4	Method Blank	Total/NA	Solid	300.0	
LCS 885-3459/2-A	Lab Control Sample	Total/NA	Solid	300.0	3459
MRL 885-3487/3	Lab Control Sample	Total/NA	Solid	300.0	

Client: Vertex

Client Sample ID: BS24-01 0'

Lab Sample ID: 885-2898-1

Date Collected: 04/12/24 08:45 **Matrix: Solid** Date Received: 04/16/24 07:55

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8015D		1	3497	JP	EET ALB	04/17/24 13:27
Total/NA	Prep	5030C			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8021B		1	3498	JP	EET ALB	04/17/24 13:27
Total/NA	Prep	SHAKE			3441	JU	EET ALB	04/17/24 11:31
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 17:57
Total/NA	Prep	300_Prep			3459	RC	EET ALB	04/17/24 15:19
Total/NA	Analysis	300.0		20	3487	JT	EET ALB	04/17/24 21:20

Client Sample ID: BS24-02 0' Lab Sample ID: 885-2898-2

Date Collected: 04/12/24 08:50 **Matrix: Solid**

Date Received: 04/16/24 07:55

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8015D		1	3497	JP	EET ALB	04/17/24 13:50
Total/NA	Prep	5030C			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8021B		1	3498	JP	EET ALB	04/17/24 13:50
Total/NA	Prep	SHAKE			3441	JU	EET ALB	04/17/24 11:31
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 18:10
Total/NA	Prep	300_Prep			3459	RC	EET ALB	04/17/24 15:19
Total/NA	Analysis	300.0		20	3487	JT	EET ALB	04/17/24 21:36

Lab Sample ID: 885-2898-3 Client Sample ID: BS24-03 0' Date Collected: 04/12/24 08:55

Date Received: 04/16/24 07:55

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8015D		1	3497	JP	EET ALB	04/17/24 14:14
Total/NA	Prep	5030C			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8021B		1	3498	JP	EET ALB	04/17/24 14:14
Total/NA	Prep	SHAKE			3441	JU	EET ALB	04/17/24 11:31
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 18:36
Total/NA	Prep	300_Prep			3459	RC	EET ALB	04/17/24 15:19
Total/NA	Analysis	300.0		20	3487	JT	EET ALB	04/17/24 22:21

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Eurofins Albuquerque

Matrix: Solid

Accreditation/Certification Summary

Client: Vertex Job ID: 885-2898-1

Project/Site: PLU 16 Twins Wells Ranch CVB

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Progr	ram	Identification Number	Expiration Date
New Mexico	State		NM9425, NM0901	02-26-25
,	s are included in this repo does not offer certification	,	not certified by the governing authori	ity. This list may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
300.0	300_Prep	Solid	Chloride	
8015D	5030C	Solid	Gasoline Range Organics	s [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [0	C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organic	s [C28-C40]
8021B	5030C	Solid	Benzene	
8021B	5030C	Solid	Ethylbenzene	
8021B	5030C	Solid	Toluene	
8021B	5030C	Solid	Xylenes, Total	
Oregon	NELA	P	NM100001	02-26-25

Eurofins Albuquerque

9

5

7

4.0

_
⊃age
15 of
у 17
7

			3
		þ	
		0	
	١		
	ь		
			i
		٥	

Mailing Address				Istody Record TO Energy, Inc)	Turn-Around Time ☐ Standard ☐ Rush 5-day Project Name				HALL ENVIRON ANALYSIS LAB							OR H				ACCEPTED BY OCES, STONE OF THE OUTST AND			
Phone # 24E-00197	Mailing	Address	5	On file		ns Wells Rand	ch CVB					awkı	ns N	E -	Albu	ıque	rque	e, N N	Л 871		-2898 C	oc Oc	,
Standard	Phone 7	# #			24E-00197					, e	1 30	J-34	5-39	escalace outrical	Segregation reconstructs	ozzania ukunaki	Production SA	olo kirk soorken start Hi	0.865-2000-000-000-000-000-000-000-000-000-0				
Sandard	email o	r Fax#			 	ager			1	6					0			£					1
04 12 24 8 45 Soil BS24-01 0' 1, 4oz jar		_		□ Level 4 (Full Validation)	Sally Carttar				3's (802	O/MR	PCB's		OSIMS		PO ₄ ,			nt/Abse					2.00.01
Date Time Relinquished by California Californ	□ NEL	AC		•	On Ice:	_⊒-Yes	□ No	104] _ [(GRO / DF	ides/8082	od 504 1)	310 or 827	- 1	03,		-VOA)	rm (Prese			i) L
Date Time Relinquished by California Californ	Date	Time	Matrix	Sample Name	Container	Preservative			1	TPH 8015D	8081 Pestic	EDB (Meth	PAHs by 83	RCRA 8 Me	Cl <u>)</u> F, Br, I	8260 (VOA	8270 (Sem	Total Colifo	ř				
04 12 24 8 55 Soil BS24-03 0' 1, 40z jar -3 X X X X X X X X X X X X X X X X X X	04 12 24	8 45	Soil	BS24-01 0'	1, 4oz jar		-(х				_									
Date Time Relinquished by Received by Via Date Time Remarks: 15124 0700 Part Man/ NAMANAA VISCULO 1700 Direct Bill to XTO Energy, Inc.	04 12 24	8 50	Soil	BS24-02 0'	1, 4oz jar		-2		х	х					х								
4-13-24 OTOO Borry Miles	04 12 24	8 55	Soil	BS24-03 0'	1, 4oz jar		-3		х	х					х								
4-11-14 OTAN Barralland Direct Bill to XTO Energy, Inc.																							
4-13-14 OTOO Bord William Direct Bill to XTO Energy, Inc.								,															
4-12-24 OTO Box Direct Bill to XTO Energy, Inc.						Mark the second																	
4-11-14 OTAN Barralland Direct Bill to XTO Energy, Inc.																							
Date Time Relinquished by Received by Via Date Time Cost Center # 2245131001 CC.Sally Carttar (scarttar@vertex.ca) for Final Report	Date	OTNO Time	Relinquish	ed by .	amme	Via	4/15/24 Date	0700 Time	Dire nAF Cos	ect B PP24 st Ce	ill to 0124 nter	1725 # 22	0 2451:	3100)1			\ f = -	. =:	J. D.		•	25n r

If necessary samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



4/18/2024

			stody Record	Turn-Around	Time					oglean	I AI		E	VV	'IF	80	NM	1	~ ~~~ /	A 0	Received by OCD: 5/9/2024 12:00:31 AM
Client	<u>vertex</u>	(Bill to X	TO Energy, Inc)	Standard Standard ANALYSIS LABO					影		ved										
				Project Name	9						www	naı	envii	ronn	nent	aı co	m				by O
Mailing	Address	;	On file	PLU 16 Twir	ns Wells Rand	ch CVB		49	01 H	awk	ıns N	IE -	Albu	uque	erqu	e, Ni	vi 871	1(88	5-2898 C	ос	S
			Project #				Τe	∍l 50	5-34	15-39	75	F	ax s	505-	345-	4107				5/9	
Phone :	#			24E-00197			Analysis Request						202								
email o	r Fax#.			Project Mana	iger		=	(O)					SO ₄			ant)		ŀ			74 L
QA/QC	Package			Sally Cartta	•		802	MR	B's		MS					\pse					2:00
□ Stan	dard		☐ Level 4 (Full Validation)	SCarttar@ve	rtex ca		3's (30/	PC		8270SIMS	ŀ	, PO4,			int/					:31
Accredi			mpliance	Sampler	L. Pullman		 TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	1-1		1	NO ₂ ,			Total Coliform (Present/Absent)					AM
□ NEL		□ Other		On Ice:	<u>Ja-</u> Yes	□ No		RO	}/sə	20	0 0	緩			δ	n (P					
	(Type) _[1		# of Coolers: Cooler Temp		10gi	/ MTBE/))Q(ticio	hod	831	Vets	Br, NO ₃ ,	3	-	forn					
				OOOICE TOTAL	l		- -	3015	Pes	Me	ğ	8	Ŗ,	8	(Sei	Sol			İ		
D - 4 -		NA - tuis	Sample Name	Container	Preservative	HEAL No.	BTEX	H _C	381	EDB (Method 504 1)	PAHs by 8310 or	RCRA 8 Metals	C <u>C</u>	8260 (VOA)	8270 (Semi-VOA)	otal					
Date	Time	Matrix	· · · · · · · · · · · · · · · · · · ·	Type and #	Туре		<u> </u>	F	8	Ш	<u> </u>	₩ (-1	<u> </u>	8	Ĕ		-		+	
04 12 24	8 45	Soil	BS24-01 0'	1, 4oz jar		-1	<u> </u>	<u> </u>					X							<u> </u>	
04 12 24	8 50	Soil	BS24-02 0'	1, 4oz jar		-2	<u> </u>	<u> </u>					X				_				
04 12 24	8 55	Soil	BS24-03 0'	1, 4oz jar		-3	Х	x					х								
												ļ									
																				1	
																		1		+	
							-										\dashv			+	\Box
							-											\dashv		+	H
								+-													
		.						-					\dashv				-	_	-	+	+
Date	Time	Relinguish	and hy	Received by	Via	Date Time	- Bo	mark	<u></u>							<u> </u>				Щ	<u> </u>
	1	Relinquish Sawa	Im.		_	d i	1			хт	O Er	nerg	y, In	c.							
Date,	Time	Relinguish		Received by.	Direct Bill to XTO Energy, Inc. Date Time Direct Bill to XTO Energy, Inc. Date Time																
41524			•			ulu ba zier		st Ce						erte	Y.C	a) fo	r Fin:	al Re	eport.		Page
	1910	()M(\/\/	ハハハハーマン omitted to Hall Environmental may be sub	contracted to other	Courrer laboratori	as This serves as notice of					'										ge 92

Login Sample Receipt Checklist

Client: Vertex Job Number: 885-2898-1

List Source: Eurofins Albuquerque Login Number: 2898

List Number: 1

Creator: Lowman, Nick

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Incident Number: nAPP2401247250



Release Assessment and Closure

Poker Lake Unit 16 Twin Wells Ranch CVB

Section 21, Township 24 South, Range 31 East

County: Eddy

Vertex File Number: 24E-00197

Prepared for:

XTO Energy

Prepared by:

Vertex Resource Services Inc.

Date:

May 2024

Release Assessment and Closure May 2024

Release Assessment and Closure
Poker Lake Unit 16 Twin Wells Ranch CVB
Section 21, Township 24 South, Range 31 East
County: Eddy

Prepared for:

XTO Energy 3104 E Greene Street Carlsbad, New Mexico 88220

New Mexico Oil Conservation Division – District 2

811 S. 1st Street Artesia, New Mexico 88210

Prepared by:

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad, New Mexico 88220

PROJECT MANAGER, REPORT REVIEW

Sally Carttar, B.A.	Date

Table of Contents

8.0

Release Assessment and Closure May 2024

1.0	Introduction	. 1
2.0	Incident Description	. 1
	·	
3.0	Site Characteristics	. 1
4.0	Closure Criteria Determination	. 2

Release Assessment and Closure May 2024

In-text Tables

- Table 1. Closure Criteria Determination
- Table 2. Closure Criteria for Soils to Remediation & Reclamation Standards

List of Figures

- Figure 1. Characterization Sampling Site Schematic
- Figure 2. Confirmatory Sampling Site Schematic

List of Tables

- Table 3. Initial Characterization Sample Field Screen and Laboratory Results Depth to Groundwater >100 feet bgs
- Table 4. Confirmatory Sample Field Screen and Laboratory Results Depth to Groundwater >100 feet bgs

List of Appendices

- Appendix A. NMOCD C-141 Report
- Appendix B. Closure Criteria Research Documentation
- Appendix C. Daily Field Reports
- Appendix D. Confirmation Sampling Notification
- Appendix E. Laboratory Data Reports and Chain of Custody Forms

Release Assessment and Closure April 2024

1.0 Introduction

XTO Energy (XTO) retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment and Closure for a crude oil release that occurred on January 3, 2024, at Poker Lake Unit 16 Twin Wells Ranch CVB (hereafter referred to as the "site"). XTO submitted an initial C-141 Release Notification (Appendix A) to New Mexico Oil Conservation Division (NMOCD) District 2 on January 12, 2024. Incident ID number nAPP2401247250 was assigned to this incident.

This report provides a description of the release assessment and remediation activities associated with the site. The information presented demonstrates that closure criteria established in Table I of 19.15.29.12 of the *New Mexico Administrative Code* (NMAC; New Mexico Oil Conservation Division, 2018) related to NMOCD has been met and all applicable regulations are being followed. This document is intended to serve as a final report to obtain approval from NMOCD for closure of this release, with the understanding that restoration of the release site will be completed at such time as all oil and gas activities are terminated and the site is reclaimed as per NMAC 19.15.29.13.

2.0 Incident Description

The release occurred on January 3, 2024, due to a flare malfunction. The incident was reported on January 12, 2024, and involved the release of an estimated 0 barrels (bbl.) of crude oil onto the pad in the area surrounding the flare. According to the spill calculation submitted to NMOCD, 0.12 bbl. of oil were released, and 0.11 bbl. were consumed in the ensuing fire. No staining was noted on the pad at the time of delineation. Additional details relevant to the release are presented in the C-141 Report in Appendix A.

3.0 Site Characteristics

The site is located approximately 16 miles east of Malaga, New Mexico (Google Inc., 2024). The legal location for the site is Section 21, Township 24 South and Range 31 East in Eddy County, New Mexico. The release area is located on Bureau of Land Management property. An aerial photograph and site schematic are presented on Figure 1.

The location is typical of oil and gas exploration and production sites in the Permian Basin and is currently used for oil and gas production and storage. The following sections specifically describe the release area surrounding the flare on the constructed pad (Figure 1).

The surface geology at the site primarily comprises Qa – Alluvium from the Holocene to upper Pleistocene ages (New Mexico Bureau of Geology and Mineral Resources, 2024) and the soil at the site is characterized as sandy clay loam (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Additional soil characteristics include a drainage class of "excessively drained" with low runoff. The karst geology potential for the site is low (United States Department of the Interior, Bureau of Land Management, 2018).

The surrounding landscape is associated with uplands, plains, dunes, and fan piedmonts with elevations ranging between 2,800 and 5,000 feet. The climate is semiarid with average annual precipitation ranging between 8 and 13 inches. Using information from the United States Department of Agriculture, the dominant vegetation was determined to be black grama, dropseeds, and bluestems with scattered shinnery oak and sand sage. Grasses with

Release Assessment and Closure April 2024

shrubs and half-shrubs dominate the historical plant community (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Limited to no vegetation is allowed to grow on the compacted production pad.

4.0 Closure Criteria Determination

The nearest active well to the site is a New Mexico Office of the State Engineer (NMOSE) exploratory borehole located approximately 0.38 miles southwest of the site (New Mexico Office of the State Engineer, 2024a, 2024b and 2024c). Data from 2020 shows the NMOSE borehole was dry at 111 feet below ground surface. Information pertaining to the depth to ground water determination is included in Appendix B.

There is no surface water present at the site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is an intermittent stream located approximately 17,000 ft. northwest of the site (United States Fish and Wildlife Service, 2024).

At the site, there are no continuously flowing watercourses or significant watercourses, lakebeds, sinkholes, playa lakes or other critical water or community features as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC. No lakebeds, sinkholes, playa lakes or other critical water or community features exist near the site as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

Release Assessment and Closure April 2024

	Closure Criteria Determination		
	e: Poker Lake Unit 16 Twin Wells Ranch CVB	V 64 40==	V 0564474
•	dinates: 32.20835, -103.78767	X:614255	Y: 3564174
ite Spec	fic Conditions	Value	Unit
	Depth to Groundwater (nearest reference)	>111	feet
1	Distance between release and nearest DTGW reference	2,050	feet
Data of pogrest DTCW reference measurement		0.38	miles
	Date of nearest DTGW reference measurement	Decemb	er 30, 2020
2	Within 300 feet of any continuously flowing watercourse	17,000	feet
	or any other significant watercourse	,	
3	Within 200 feet of any lakebed, sinkhole or playa lake	60,000	feet
	(measured from the ordinary high-water mark)	00,000	1000
4	Within 300 feet from an occupied residence, school,	45,000	feet
4	hospital, institution or church	43,000	reet
	i) Within 500 feet of a spring or a private, domestic fresh		
	water well used by less than five households for	85,000	feet
5	domestic or stock watering purposes, or		
	ii) Within 1000 feet of any fresh water well or spring	85,000	feet
	in with 1999 rect of any fresh water well of spring	03,000	1661
	Within incorporated municipal boundaries or within a		
	defined municipal fresh water field covered under a		
6	municipal ordinance adopted pursuant to Section 3-27-3	No	(Y/N)
	NMSA 1978 as amended, unless the municipality		
	specifically approves		
7	Within 300 feet of a wetland	12,000	feet
	Within the area overlying a subsurface mine	No	(Y/N)
8	Distance between release and nearest registered mine	61.002	feet
	Distance between release and flearest registered filline	61,082	reet
			Critical
	Within an unstable area (Karst Map)	Low	High
9	Within an unstable area (Karst Wap)	LOW	Medium
9			Low
	Distance between release and nearest high- or critical-	7	miles
	karst zone	,	Tilles
	Within a 100-year Floodplain	Undetermined	year
10	Distance between release and nearest FEMA Zone A (100-	14,300	feet
	year Floodplain)	17,300	1661
11	Soil Type	sandy	clay loam
12	Ecological Classification	Sar	ndhills
13	Geology	Eolian and pie	edmont deposits
			<50'
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	>100'	51-100'
			>100'

The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2.

Table 2. Closure Criteria for Soils to Remediation & Reclamation Standards									
	Constituent	Limit							
0-4 feet bgs (19.15.29.13)	Chloride	600 mg/kg							
0-4 feet bgs (19.15.29.15)	TPH (GRO+DRO+MRO)	100 mg/kg							
	Chloride	20,000 mg/kg							
	TPH (GRO+DRO+MRO)	2,500 mg/kg							
DTGW > 100 feet (19.15.29.12)	GRO+DRO	1,000 mg/kg							
	BTEX	50 mg/kg							
	Benzene	10 mg/kg							

bgs – below ground surface

DTGW - depth to groundwater

TPH - total petroleum hydrocarbons, GRO - gas range organics, DRO - diesel range organics, MRO - motor oil range organics

BTEX - benzene, toluene, ethylbenzene and xylenes

5.0 Remedial Actions Taken

An initial site inspection of the release area was completed on March 11, 2024, which identified the area of the release specified in the initial C-141 Report. The impacted area was determined to be approximately 25 feet long and 15 feet wide; the total affected area was 317 square feet. The Daily Field Report associated with the site inspection is included in Appendix C.

Delineation was completed on March 19, 2024. Field screening was completed on a total of 11 samples and consisted of analysis using a Photo Ionization Detector (volatile hydrocarbons), Dexsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and silver nitrate titration (chlorides). Field screening and laboratory analysis results are presented in Table 3. No exceedances to strictest closure criteria were identified at the time of delineation.

Confirmation sampling was completed on April 12, 2024. Notification of confirmation sampling was submitted to NMOCD 48 hours prior to the sampling event and is included in Appendix D. Field screening and laboratory analysis results from confirmation sampling are presented in Table 4.

Samples were submitted to Eurofins South Central, Albuquerque, New Mexico, under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA Method 300.0). Laboratory results are presented in Table 4, and the laboratory data report is included in Appendix E. All samples collected and analyzed were below closure criteria for the site, and no staining or other evidence of contamination was identified.

6.0 Closure Request

All activity at the site was completed by April 12, 2024. Samples were analyzed by the laboratory and found to be below allowable concentrations as per the NMAC Closure Criteria for Soils Impacted by a Release locations "greater than 100"

Release Assessment and Closure April 2024

feet to groundwater". Based on these findings, XTO Energy requests that this release be closed.

Should you have any questions or concerns, please do not hesitate to contact Sally Carttar at 575.361.3561 or scarttar@vertex.ca.

7.0 References

- Google Inc. (2024). Google Earth Pro (Version 7.3.3) [Software]. Retrieved from https://earth.google.com
- New Mexico Bureau of Geology and Mineral Resources. (2024). *Interactive Geologic Map*. Retrieved from https://maps.nmt.edu/
- New Mexico Department of Surface Water Quality Bureau. (2024). Assessed and Impaired Waters of New Mexico.

 Retrieved from https://gis.web.env.nm.gov/oem/?map=swqb
- New Mexico Energy, Minerals and Natural Resources Department. (2024). *OCD Permitting Spill Search*. Retrieved from https://wwwapps.emnrd.nm.gov/ocd/ocdpermitting/Data/Spills/Spills.aspx
- New Mexico Mining and Minerals Division. (2024). *Registered Mines Web Map*. Retrieved from https://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=5f80f3b0faa545e58fe747cc7b037a93
- New Mexico Office of the State Engineer. (2024a). *Point of Diversion Location Report New Mexico Water Rights Reporting System*. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/wellSurfaceDiversion.html
- New Mexico Office of the State Engineer. (2024b). Water Column/Average Depth to Water Report New Mexico Water Rights Reporting System. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/waterColumn.html
- New Mexico Office of the State Engineer. (2024c). Well Log/Meter Information Report New Mexico Water Rights Reporting System. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/meterReport.html
- New Mexico Oil Conservation Division. (2018). *New Mexico Administrative Code Natural Resources and Wildlife Oil and Gas Releases*. Santa Fe, New Mexico.
- United States Department of Agriculture, Natural Resources Conservation Service. (2024). *Web Soil Survey*. Retrieved from https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
- United States Department of Homeland Security, Federal Emergency Management Agency. (2024). *FEMA Flood Map Service: Search by Address*. Retrieved from https://msc.fema.gov/portal/search?AddressQuery=malaga% 20new%20mexico#searchresultsanchor
- United States Department of the Interior, Bureau of Land Management. (2018). *New Mexico Cave/Karst*. Retrieved from https://www.nm.blm.gov/shapeFiles/cfo/carlsbad_spatial_data.html
- United States Fish and Wildlife Service. (2024). *National Wetland Inventory Surface Waters and Wetlands*. Retrieved from https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/
- United States Geological Survey. (2024). *National Water Information System: Web Interface*. Retrieved from https://waterdata.usgs.gov/nwis

Release Assessment and Closure April 2024

8.0 Limitations

This report has been prepared for the sole benefit of XTO Energy. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division and the Bureau of Land Management, without the express written consent of Vertex Resource Services Inc. (Vertex) and XTO Energy. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS

Action 342063

QUESTIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	342063
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites							
Incident ID (n#)	nAPP2401247250						
Incident Name	NAPP2401247250 PLU 16 TWIN WELLS RANCH CVB @ 0						
Incident Type	Fire						
Incident Status	Remediation Closure Report Received						

Location of Release Source							
Please answer all the questions in this group.							
Site Name	PLU 16 Twin Wells Ranch CVB						
Date Release Discovered	01/03/2024						
Surface Owner	Federal						

Incident Details	
Please answer all the questions in this group.	
Incident Type	Fire
Did this release result in a fire or is the result of a fire	Yes
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Equipment Failure Other (Specify) Crude Oil Released: 0 BBL Recovered: 0 BBL Lost: 0 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	The flare malfunctioned.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS, Page 2

Action 342063

Phone:(505) 476-3470 Fax:(505) 476-3462	
QUEST	ONS (continued)
Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380 Action Number: 342063 Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)
QUESTIONS	
Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	More info needed to determine if this will be treated as a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (2) an unauthorized release of a volume that: (a) results in a fire or is the result of a fire.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.	e. gas only) are to be submitted on the C-129 form.
Initial Response	
The responsible party must undertake the following actions immediately unless they could create a s	safety hazard that would result in injury.
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.
	iation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of ted or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of valuation in the follow-up C-141 submission.
to report and/or file certain release notifications and perform corrective actions for release the OCD does not relieve the operator of liability should their operations have failed to	knowledge and understand that pursuant to OCD rules and regulations all operators are required asses which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or
I hereby agree and sign off to the above statement	Name: Melanie Collins Title: Regulatory Analyst

Email: Melanie.Collins@exxonmobil.com

Date: 01/12/2024

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS, Page 3

Action 342063

QUESTIONS (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	342063
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

be provided to the appropriate district office no later than 90 days after the release discovery date.		
Yes		
contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.		
pated Yes		
No		
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
170		
0		
0		
OB) 0		
0B) 0		
des completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC tion.		
04/12/2024		
04/12/2024		
04/12/2024		
ned 317		
0		
iated 317		
0		
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
r		

significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

District I

1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

<u>District II</u> 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 **District III**

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

QUESTIONS, Page 4

Action 342063

QUESTIONS (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	342063
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
This remediation will (or is expected to) utilize the following processes to remediate	e / reduce contaminants:	
(Select all answers below that apply.)	(Select all answers below that apply.)	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Not answered.	
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.	
(In Situ) Soil Vapor Extraction	Not answered.	
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.	
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.	
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.	
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.	
OTHER (Non-listed remedial process)	Yes	
Other Non-listed Remedial Process. Please specify	All activity at the site was completed by April 12, 2024. Samples were analyzed by the laboratory and found to be below allowable concentrations as per the NMAC Closure Criteria for Soils Impacted by a Release locations greater than 100 ft to groundwater.	

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement

Name: Alan Romero Title: Regulatory Analyst

Email: alan.romero1@exxonmobil.com

Date: 05/08/2024

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS, Page 5

Action 342063

QUESTIONS (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	342063
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation. Requesting a deferral of the remediation closure due date with the approval of this No submission

District I

Phone: (575) 393-6161 Fax: (575) 393-0720

District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 **District III**

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

QUESTIONS, Page 6

Action 342063

QUESTIONS ((continued)

<u> </u>	
Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	342063
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)
QUESTIONS	
Sampling Event Information	

Sampling Event Information	
Last sampling notification (C-141N) recorded	331369
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/12/2024
What was the (estimated) number of samples that were to be gathered	3
What was the sampling surface area in square feet	500

Remediation Closure Request				
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.				
Requesting a remediation closure approval with this submission	Yes			
Have the lateral and vertical extents of contamination been fully delineated	Yes			
Was this release entirely contained within a lined containment area	No			
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes			
What was the total surface area (in square feet) remediated	0			
What was the total volume (cubic yards) remediated	0			
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes			
What was the total surface area (in square feet) reclaimed	0			
What was the total volume (in cubic yards) reclaimed	0			
Summarize any additional remediation activities not included by answers (above)	Reclamation will take place upon site abandonment.			

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Name: Alan Romero
I hereby agree and sign off to the above statement
Title: Regulatory Analyst
Email: alan.romero1@exxonmobil.com
Date: 05/08/2024

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS, Page 7

Action 342063

QUESTIONS	(continued)
QUESTIONS:	COHUHUCU <i>i</i>

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	342063
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 342063

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	342063
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	y Condition	Condition Date
scwells	None	5/22/2024